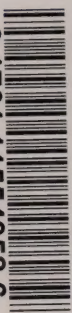



3 1761 11554958 6









Digitized by the Internet Archive  
in 2022 with funding from  
University of Toronto

<https://archive.org/details/31761115549586>





CAI EP 321

-75R07

(4)

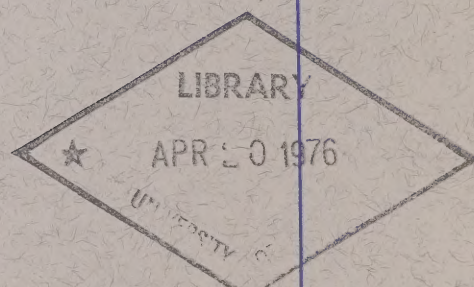
Pacific Marine Science Report 75-7

Government  
Publications

*Canada Marine Sciences Directorate  
Pacific Region*

# THE HOWE SOUND CURRENT METERING PROGRAM, VOLUME III, PART 1 – DATA REPORT, STN. HS-5

by  
W.H. Bell



INSTITUTE OF OCEAN SCIENCES, PATRICIA BAY

Victoria, B.C.





For additional copies or further information, please write to:

Environment Canada  
Institute of Ocean Sciences, Patricia Bay  
512 - 1230 Government Street  
Victoria, B.C.  
V8W 1Y4



CAI EP 321  
-75R07

PACIFIC MARINE SCIENCE REPORT 75-7

THE HOWE SOUND CURRENT METERING PROGRAM,  
VOLUME III, PART 1 - DATA REPORT, STN. HS-5

by

W.H. Bell

INSTITUTE OF OCEAN SCIENCES, PATRICIA BAY

Victoria, B.C.

June, 1975

This is a manuscript which has received only limited circulation. On citing this report in a bibliography, the title should be followed by the words "UNPUBLISHED MANUSCRIPT" which is in accordance with accepted bibliographic custom.



## ABSTRACT

Current meter data, and some temperature and salinity data, obtained for several depths at three locations in Howe Sound are presented in three volumes. The presentations are chiefly statistical in nature. They extend over a period slightly greater than two years, beginning in late 1971.





## TABLE OF CONTENTS

	<u>Page</u>
Introduction . . . . .	1
Observational Procedures . . . . .	1
Data Processing and Presentation . . . . .	3
Acknowledgements . . . . .	4
References . . . . .	4
Data for 3-Metre Depth . . . . .	11
Data for 5-Metre Depth . . . . .	73
Data for 7-Metre Depth . . . . .	217
Data for 10-Metre Depth . . . . .	253
Data for 15-Metre Depth . . . . .	353

## LIST OF TABLES

Table I - Data Acquisition and Processing History for Current Meters at Stn. HS-5 . . . . .	5
--	---

## LIST OF FIGURES

Figure 1 - Chart of Howe Sound showing station locations . . . . .	8
Figure 2 - Axial section along the main channel of Howe Sound . . .	9
Figure 3 - Time history of current meter observations - Stn. HS-5 .	10





## INTRODUCTION

In 1971, interest was expressed in examining the oceanographic characteristics of Howe Sound in some detail. The Federal Government had announced that a large rail terminal and deep-water ship docking facility would be established at the head of Howe Sound. This facility would be used to supply much of British Columbia's interior population and industry, and to ship out export materials. As a result, a considerable increase in marine traffic was anticipated, increasing the need for information on tidal currents and other water movements, and increasing the possibilities for contamination of the Sound.

There were other reasons for the interest as well. Several industries having a high pollution potential were already in operation in Howe Sound and, with the construction of the proposed shipping facility, more were likely to be established. Future population expansion in the Lower Mainland area might be met to some extent by residential development in some areas of Howe Sound, with attendant environmental problems such as waste disposal and increased silt loads. The development of a transport or dispersion model for water-quality management in Howe Sound was proposed, which would require an oceanographic data input. In addition, various biological, chemical and ecological studies were underway or proposed for the Sound, most of which required some knowledge of the oceanographic features of the area.

Only a limited amount of data was available from previous studies, principally those of Waldichuk et al (1968) who conducted periodic cruises to the vicinity of a number of effluent-producing industries. The current measurements were sparse, and were obtained using surface drogues and Ekman current meters deployed over the side of a ship. The Institute of Oceanography at the University of British Columbia had also obtained a small amount of data in Howe Sound.

The measurement program subsequently undertaken consisted of two hydrographic cruises and a series of moored-buoy installations. The cruise data has been previously reported (Bell, 1974). The purpose of the present report is to present the data obtained by instruments suspended beneath the buoys, principally current speed and direction, accompanied much of the time by temperature values and occasionally by salinities.

## OBSERVATIONAL PROCEDURES

The current-metering program in Howe Sound, using taut-line moored buoys, originally anticipated that six stations would be occupied for a period of up to a year each. At every station, several self-recording current meters would be suspended at various depths below the surface. An anemometer would be mounted on each buoy for wind measurements. As it developed, there were only sufficient resources available to maintain two stations at a time, and only three stations were occupied. Also, there was only one anemometer available for a short period of time and it malfunctioned.

The program commenced in November, 1971 with a buoy installation at Station HS-4 (Fig. 1). Current meters were placed at depths of 3, 10, 30, and 130 metres from the surface. The water depth was 145 metres. Measurements at

this station continued through to November, 1972. A second installation was made at Station HS-3, commencing in February, 1972 and continuing through to November of that year. In this case, current meters were located at depths of 3, 10, 30 and 235 metres, with a water depth of about 250 metres. The final station to be monitored was HS-5. This station is a short distance inside the sill in Howe Sound (Fig. 2). Here, sufficient current meters were being used so that it was decided to install two separate arrays about 250 metres apart, thus reducing the loss if a buoy should chance to be snagged by the tow line of one of the many tug boats traversing the area. The first buoy was installed at the end of November, 1972 and the second in January, 1973. Current meters were located at up to eight different depths for varying periods of time. The arrays were finally removed in February, 1974. Generally speaking, the instruments were deployed for about six weeks at a time, after which they were recovered for replacement of batteries and magnetic recording tape. The principal vessel used in this work was F.R.B. A.P. KNIGHT.

Two types of current meters were employed in the program. The Geodyne Model A-850 was used in the near-surface position (about 3 metres depth) because it has a small directional vane enclosed within a cage. Thus, it was unlikely to tangle with the anchor line of the buoy in the event of turbulent surface motions. The Aanderaa Model 4 was used at all other depths. It does have a large unprotected directional fin which could cause problems if placed too close to the buoy. The manufacturer of the Geodyne meter claims a threshold velocity of 26 mm/s, a speed accuracy of 26 mm/s for speeds below 500 mm/s and a direction accuracy of  $\pm 10$  degrees. The calibration factor given for the Aanderaa meter implies a threshold velocity of 15 mm/s. The direction accuracy is  $\pm 5$  degrees. The Aanderaa meter is fitted with a thermistor, providing temperatures with a resolution of about 0.02 degrees C. Some of these meters also have conductivity sensors with a resolution of 0.07 mmhos. The Geodyne meter samples in "bursts", recording 15 measurements spaced 5 seconds apart and repeating the procedure every 15 minutes. The vector average of the 15 measurements is used in subsequent processing. The Aanderaa meter takes a single sample of direction for each 10 minute interval, but integrates the speed over this whole period. The two types of current meters have been described in more detail by Tabata et al (1971).

Although no wind data were obtained at the actual buoy locations, some observations are available from nearby points. The Atmospheric Environment Service of Environment Canada maintains an anemometer at the head of Howe Sound. As one might expect from the topography of the area, there appears to be a reasonable correlation between the north-south components of wind velocity measured at this location and those experienced at seaward points along the axis of the Sound (except occasionally in one or two locations where the flow of cold air down a hanging valley complicates the situation). Also, Dr. L. Giovando at the Pacific Environment Institute in West Vancouver had several anemometers deployed at various locations in Howe Sound during 1972-73. In particular, one was positioned on Pam Rock, near Station HS-3.



## DATA PROCESSING AND PRESENTATION

The raw data tapes from the Geodyne meters had to be sent to the instrument manufacturer (E.G. & G., Waltham, Mass.) for translation to an IBM-compatible format. They returned a 9-track magnetic tape, containing the translated data, for further processing as required. The raw data tapes from the Aanderaa instruments were translated in-house, using a HP2115 mini-computer and software developed by Del Smith. Second stage processing of the translated data consisted of formatting the data for FORTRAN routines and applying appropriate calibration factors where necessary. During this stage, an acceleration criterion and an interpolation scheme were applied to speed data to smooth out any unrealistic variations or 'spikes'. These spikes arose from readings in the dead-band area of the speed potentiometer and from tape noise.

Requests received from biologists and ecologists indicated a preference for examination of the data in graphical form, such as histograms and progressive vector diagrams (PVD's), rather than in time series form. Therefore, the data are presented here in the following forms:

- (a) PVD
- (b) Frequency distribution plot for speed and direction
- (c) Frequency distribution list for speed and direction
- (d) Speed histogram
- (e) Direction histogram
- (f) Temperature histogram (when available)
- (g) Salinity histogram (when available)

The processing routines were written so that each of these presentations came directly from the computer in page size. This allowed the printer to use them directly without resorting to photographic reduction first. It was necessary to break the information contained on a data tape into two or three smaller segments to avoid cluttering the PVD's. A data length of about 3 weeks appeared optimum, so the basic segments for presentation were taken to be 2000 records for Geodyne tapes (15 min. sample interval) and 3000 records for Aanderaa tapes (10 min. interval). If the number of records left at the end of a tape was less than 1/3 of the basic number, then these records were grouped with the preceding segment. The initial segment of each data tape contained a varying number of records which were of no value because they represent samples taken after the instruments were switched on but before they were in position in the water. Such samples were included in the translation procedure for timing purposes but were omitted from subsequent processing. Thus, in the presentations, some of the initial segments have fewer than 2000 or 3000 records, and some of the final segments have more. Hourly averages were used in plotting the PVD's. The frequency distribution diagrams have a change in the scale of the speed axis for water depths of 30 m or more.

The histogram presentations occasionally have truncated peaks. This



was done to provide greater detail in the remainder of the plot. The correct height of the peak is given in the frequency column of the histogram. The resolution available in the data logging process is limited and occasionally results in quirks in the histograms. For example, the temperature resolution is about  $0.02^{\circ}\text{C}$ . Whenever the counting increment for the histogram is also  $0.02^{\circ}\text{C}$ , the result of the interaction is that not all of the increments obtain counts, some being blank or empty. A similar phenomenon occurs in some speed histograms, most notably for the increment from 77-80 mm/sec when the increment size is 4 mm/sec. The output from the Aanderaa current meter represented by the number 15 is processed and rounded off by the computer program to give 76 mm/sec. The number 16 rounds to 81 mm/sec. Thus, there is no possibility of obtaining counts for the increment in question.

Some data were lost due to instrument malfunctions, weak batteries, and water leaks. Some data were not recoverable because of a very low signal-to-noise ratio, apparently resulting from poor or improper tape degaussing techniques. Unfortunately, data analysis was lagging well behind instrument deployment, so some of these problems weren't detected immediately. The lengths of record for the station reported on in this volume, and the reasons for loss of data, are given in Figure 3 and Table I.

Because of the large amount of data involved, the results are presented in three volumes, one dealing with each station. The original data is available on request for anyone wishing to examine the time series obtained for a given period at a particular station and depth.

#### ACKNOWLEDGEMENTS

The data presented in this series of reports could not have been obtained without the expert work of J.A. Stickland and R.H. Bigham, who designed and supervised the moorings and maintained the instruments. They were ably assisted on occasion by J.H. Meikle and R. Forbes. The captain and crew of F.R.B. A.P. KNIGHT also provided willing support to the undertaking.

Some of the data processing routines were modified from programs kindly supplied by R. Johns. Much of actual mechanics of punching cards and feeding them to the computer was done by C. Goodman.

#### REFERENCES

- Bell, W.H. 1974. Oceanographic Observations in Howe Sound - 1972. Pac. Mar. Sci. Rept. 74-7, Marine Sciences Directorate, Victoria.
- Tabata, S., J.A. Stickland and B.R. de Lange Boom. 1971. The Program of Current Velocity and Water Temperature Observations from Moored Instruments in the Strait of Georgia - 1968-1970 and Examples of Records Obtained. Tech. Rept. No. 253, Fish. Res. Bd. Can., Nanaimo.
- Waldichuk, M., J.R. Markert and J.H. Meikle. 1968. Fraser River Estuary, Burrard Inlet, Howe Sound and Malaspina Strait Physical and Chemical Oceanographic Data, 1957-1966, Volume II, Sept. 1962 to July 1966. M.S. Rept. Series No. 939, Fish. Res. Bd. Can., Nanaimo.

TABLE I

DATA ACQUISITION AND PROCESSING HISTORY FOR CURRENT METERS AT STN. HS-5

START DAY (PST)	DEPTH (M)	NO. OF RECORDS	DATA TAPE NO.	STAGE 1 TRANSLATION		STAGE 2 TRANSLATION		NOTES
				TAPE NO.	FILE NO.	TAPE NO.	FILE NO.	
24/11/72	3	0	236/4					d,k
	7	7897	102H/1	RE0322	1	RE0158	20	f,g,k
	15	7898	97/18	RA0279	11	RE0158	57	
	30	7882	333/6	RE0322	3	RE0158	21	
	150	7884	335/7	RE0322	4	RE0158	58	
15/01/73	3	5080	239/7	RB0410	15	RB0411	36	
	5	7371	640/1	RE0322	5	RE0158	11	
	7	7221	334/10	RE0322	6	RE0158	22	
	10	7371	210/10	RE0322	7			
	15	7222	637/1	RE0322	8	RE0158	12	
	20	6939	333/7	RE0322	10	RE0158	23	
	30	7228	638/1	RE0322	11	RE0158	59	
	150	7222	639/1	RE0322	12	RE0158	60	
	3	4960	241/2	RB0410	16	RB0411	21	
	5	7046	640/2	RE0322	13	RE0158	13	
07/03/73	7	7480	334/11	RE0322	14	RE0158	24	
	10	7046	210/11	RE0322	15			
	15	7338	637/2	RE0322	16	RE0158	14	
	20	7046	333/8	RE0322	17	RE0158	25	
	30	7338	638/2	RE0322	18	RE0158	61	
	150	7338	639/2	RE0322	19	RE0158	62	
	3	4306	239/8	RB0410	18	RB0411	20	
	5	6340	738/1	RE0322	20	RE0158	1	
	7	6043	210/12	RE0322	21			
	10	6341	739/1	RE0322	22	RE0158	2	
24/04/73	15	5897	637/3	RE0322	23	RE0158	3	

TABLE I (CONT'D.)

START DAY (PST)	DEPTH (M)	NO. OF RECORDS	DATA TAPE NO.	STAGE 1 TRANSLATION		STAGE 2 TRANSLATION		NOTES
				TAPE NO.	FILE NO.	TAPE NO.	FILE NO.	
06/06/73	20	6185	640/3	RE0322	24	RE0158	4	
	30	5899	638/3	RE0322	25	RE0158	63	
	150	5897	639/3	RE0322	26	RE0158	64	
	3	7000	241/3	RB0410	17	RB0411	22	
	5	9813	637/4	RE0322	27	RE0158	5	
	10	9305	739/2	RE0322	28	RE0158	6	
	20	9671	738/2	RE0322	29	RE0158	7	
	30	9943	638/4	RE0322	30	RE0158	65	
	150	9941	639/4	RE0322	31	RE0158	66	
13/08/73	3		239/9					
	5	5430	637/5	RE0322	32	RE0158	8	
	10	5429	738/3	RE0322	33	RE0158	15	
	20	5429	739/3	RE0322	34	RE0158	9	
	30	5177	638/5	RE0322	35	RE0158	67	
20/09/73	150	5177	639/5	RE0322	36	RE0158	68	
	3		239/10					
	5	6917	739/4	RE0322	37	RE0158	10	
	10	6917	637/6	RE0322	38	RE0158	16	
	20	6917	738/4	RE0322	39	RE0158	17	
	30	6922	638/6	RE0322	40	RE0158	69	
	150	6922	639/6	RE0322	41	RE0158	70	
07/11/73	3		239/11					
	5	8735	739/5	RA0279	8	RE0158	54	
	10	8763	637/7	RA0279	9	RE0158	73	
	20	8723	738/5	RA0279	10	RE0158	56	
	30	8895	638/7	RA0279	13	RE0158	74	
	150	8895	639/7	RA0279	14	RE0158	75	



TABLE I (CONT'D.)

START DAY (PST)	DEPTH (M)	NO. OF RECORDS	DATA TAPE NO.	STAGE 1 TRANSLATION		STAGE 2 TRANSLATION		NOTES
				TAPE NO.	FILE NO.	TAPE NO.	FILE NO.	
02/01/74	3		236/5					
	5	8924	509/9	RA0279	12	RE0158	55	
	10	8925	507/9	RA0279	3	RE0158	50	
	20	8924	506/7	RA0279	5	RE0158	51	
	30	8671	334/14	RA0279	7	RE0158	53	
	150	8916	333/11	RA0279	6	RE0158	52	

NOTES:

- a. Instrument failure - water leak
- b. Instrument failure - encoder or other data logger fault
- c. Instrument failure - weak battery
- d. Instrument failure - reason unknown
- e. Rotor failure or fault in speed recording channel
- f. Compass or vane failure or fault in direction channel
- g. Thermistor failure or fault in temperature channel
- h. Conductivity sensor failure or fault in conductivity channel
- i. Unreliable or "noisy" data - reason unknown
- j. Unreliable or "noisy" data - tape degaussing problem
- k. Data irretrievable
- l. Data retrievable with great difficulty
- m. Data retrievable with some difficulty
- n. Data retrievable with little difficulty



Figure 1

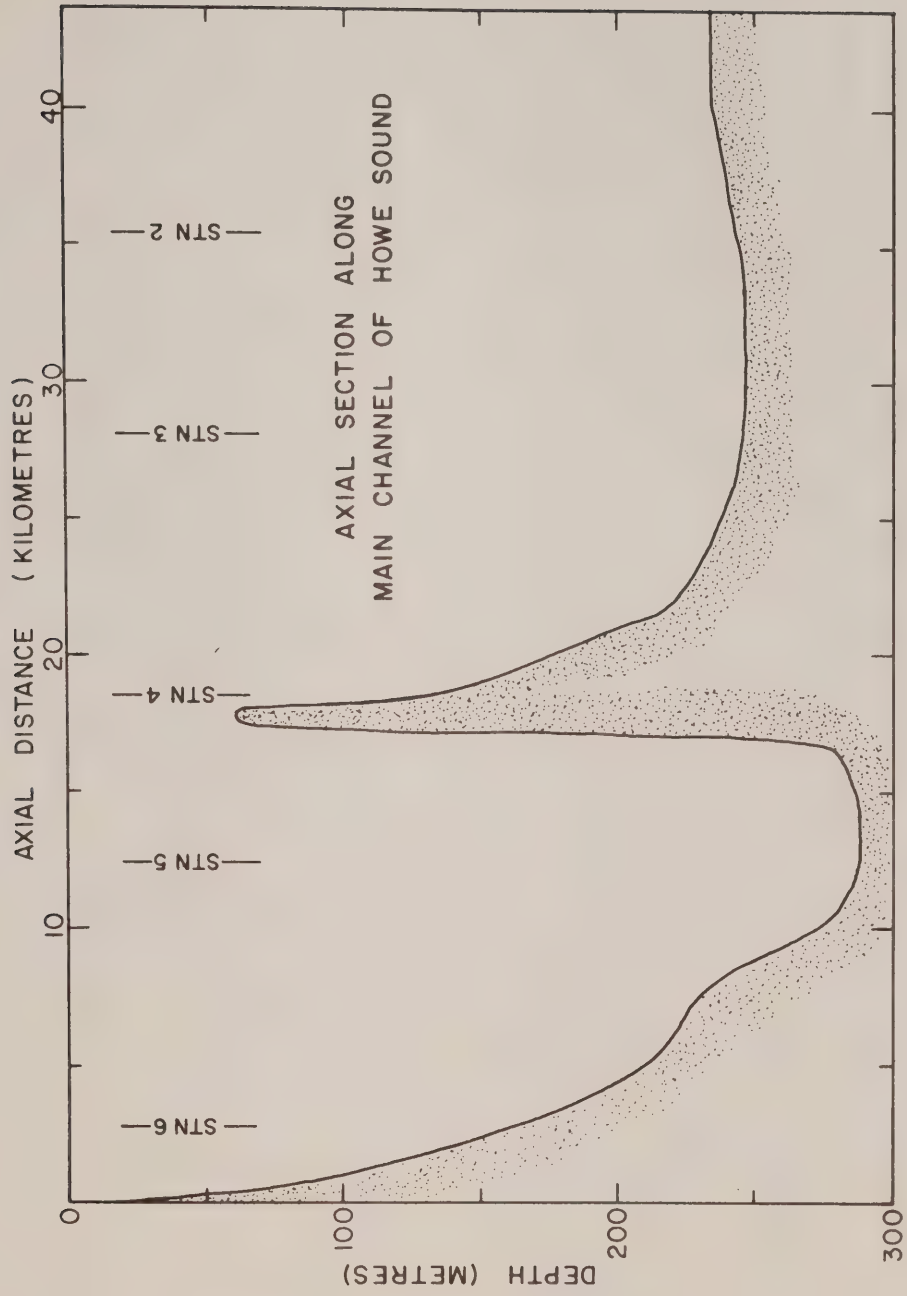


Figure 2



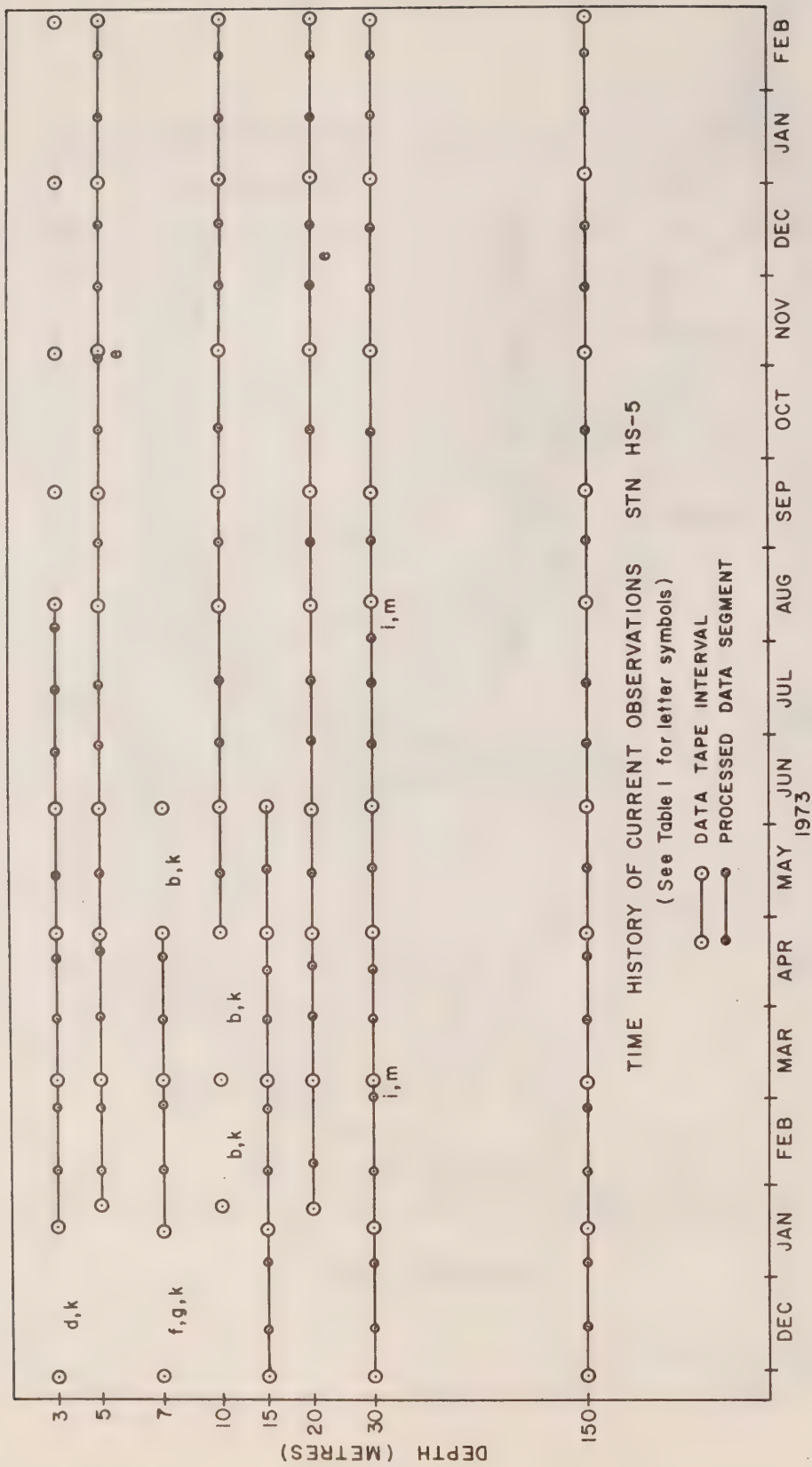
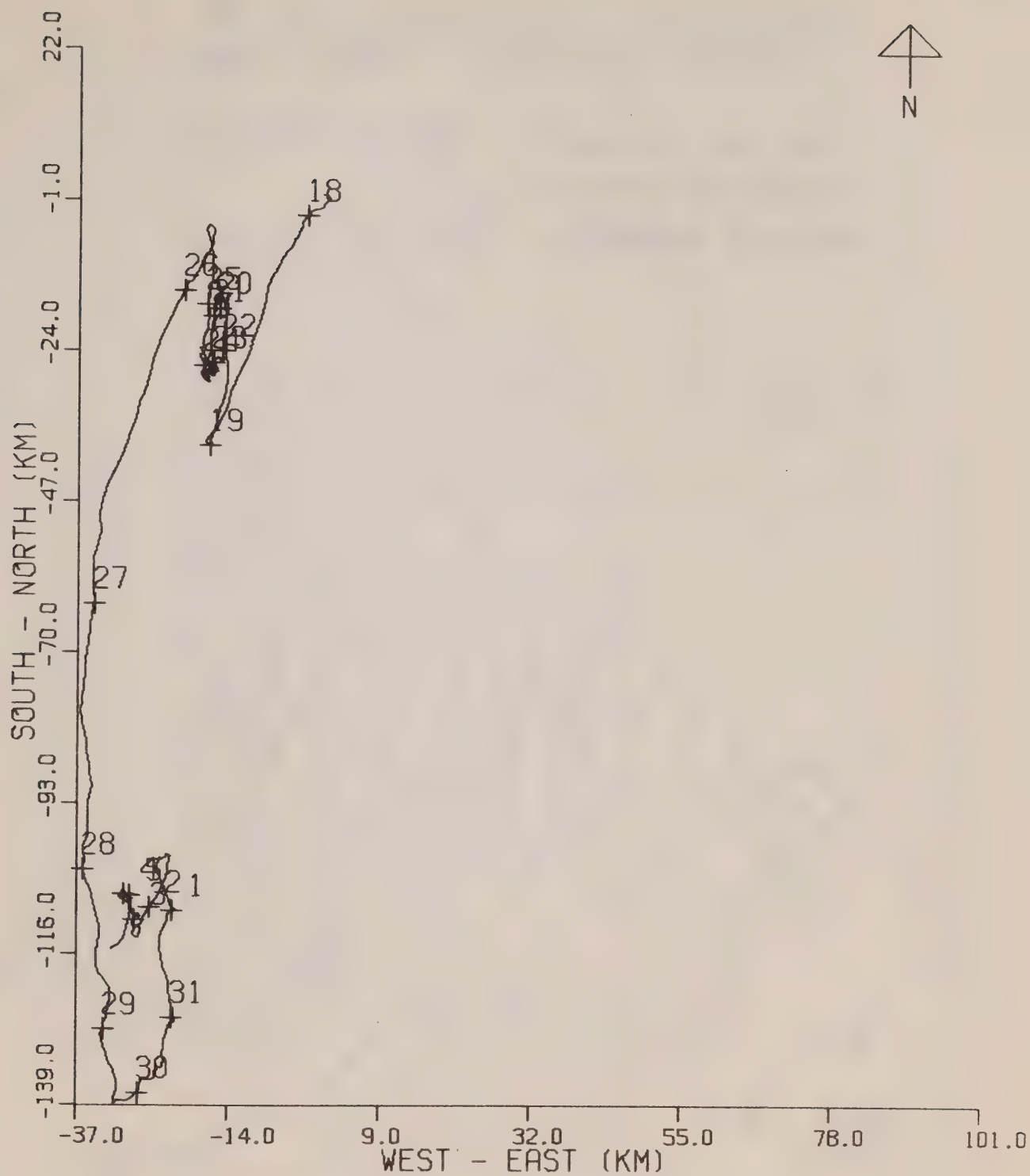


Figure 3

DATA FOR 3-METRE DEPTH







STN. NO. HS-5S

DEPTH 3 M.

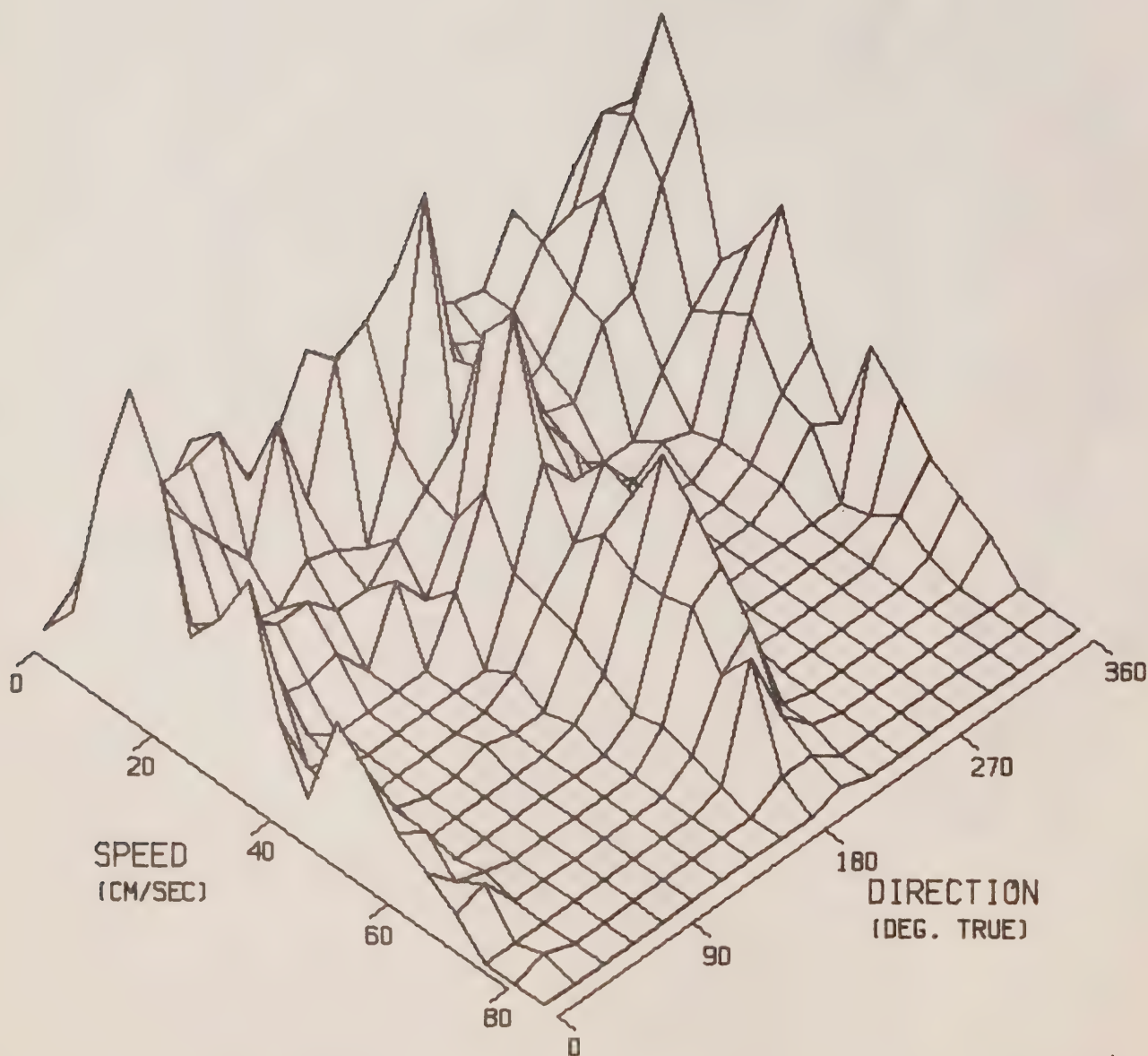
STARTING DATE: 17/ 1/73      ENDING DATE: 5/ 2/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 17/ 1/73

NO. OF SAMPLES = 1804





STN. NO. HS-55 DEPTH 3 M.

STARTING DATE: 17/ 1/73  
SAMPLE INTERVAL = 15 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

DIR	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	012	040	031	011	015	006	014	013	008	001		001	152
15- 29	013	019	007	010	006	002	002	004	001	001		001	66
30- 44	008	014	016	004	003	001	001	001					48
45- 59	012	022	004	008									46
60- 74	012	014	008	003	001								38
75- 89	015	014	006	006	001								42
90-104	011	023	015	002		001							52
105-119	011	012	005	006									34
120-134	005	015	008	007									35
135-149	011	025	011	009	006	002	001						65
150-164	011	020	021	006	013	007	006	001	002	001			88
165-179	007	022	030	018	017	016	010	008	009	002			139
180-194	005	026	028	027	044	019	026	021	022	016	001		235
195-209	013	017	020	025	018	015	017	020	013	003			161
210-224	006	007	017	019	017	009	013	011	003	002			104
225-239	010	011	008	008	007	010	003						57
240-254	006	010	007	004	003	002	001						33
255-269	009	009	003	001	001								23
270-284	012	009	003	002	001								27
285-299	011	012	010		001								34
300-314	012	017	006	003									38
315-329	013	019	020	002	003	003							60
330-344	012	026	022	013	008	005		001					87
345-359	008	029	031	016	027	012	007	006	004				140
	245		337		192		101		62		1		1804
		432		210		110		86		26		2	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 3M. START DATE 17/01/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	40	80	120	160	200
13	38	2	*****				
39	82	5	*****				
65	118	7	*****				
91	135	7	*****				
117	151	8	*****				
143	138	8	*****				
169	134	7	*****				
195	102	6	*****				
221	100	6	*****				
247	79	4	*****				
273	53	3	*****				
299	70	4	*****				
325	83	5	*****				
351	73	4	*****				
377	48	3	*****				
403	43	2	*****				
429	36	2	*****				
455	29	2	*****				
481	34	2	*****				
507	35	2	*****				
533	33	2	*****				
559	36	2	*****				
585	31	2	*****				
611	23	1	*****				
637	21	1	*****				
663	24	1	*****				
689	16	1	****				
715	15	1	****				
741	11	1	***				
767	5	0	*				
793	5	0	*				
819	0	0					
845	1	0					
871	1	0					
897	1	0					
923	0	0					
949	0	0					
975	0	0					
1001	0	0					
1027	0	0					

NO. OF SAMPLES OVER 1040 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1804  
 SAMPLE INTERVAL = 15 MINUTES

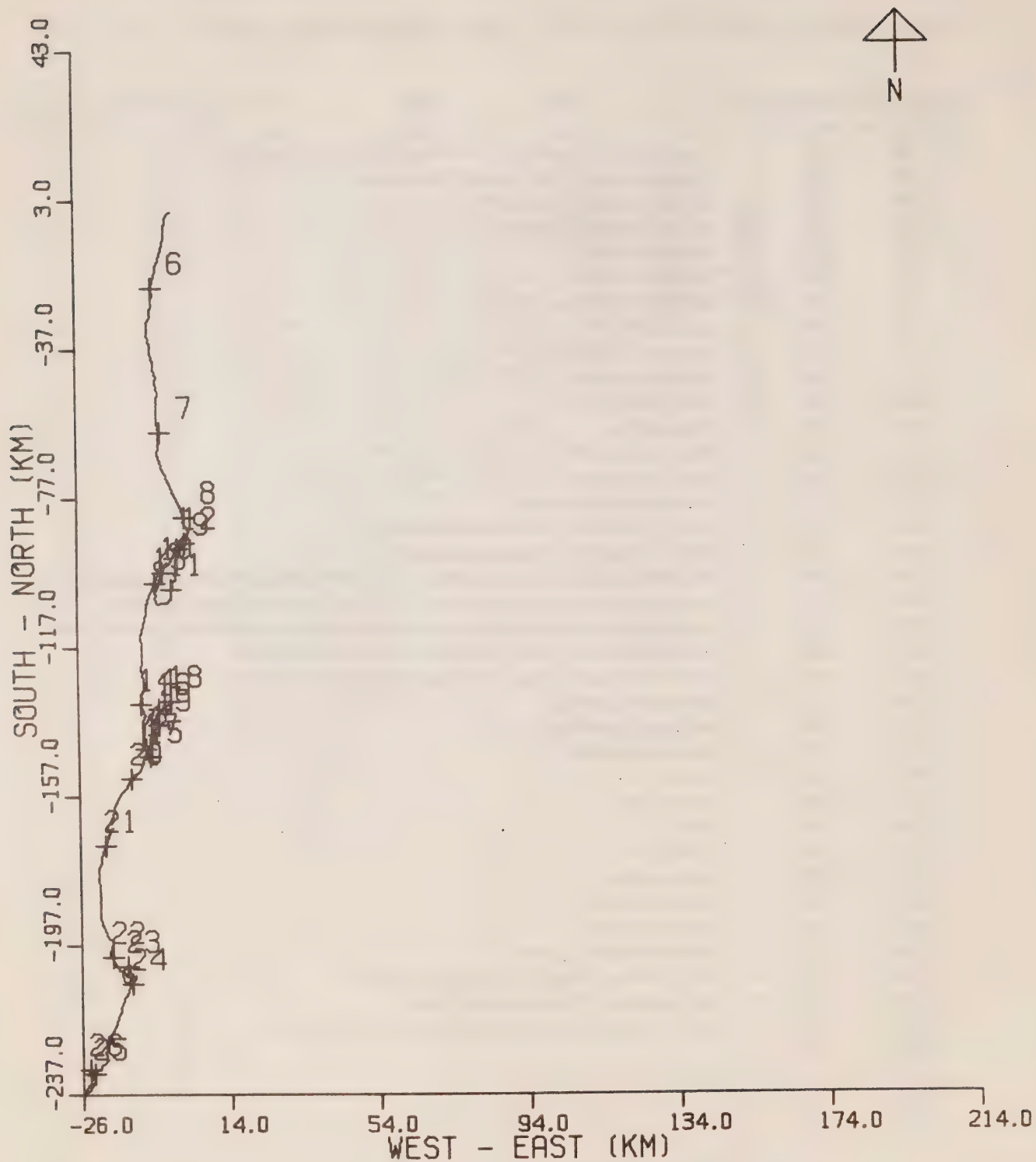
## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 3M. START DATE 17/01/73

MEDIAN (DEG.T)	FREQUNCY NO.	PCT	30	60	90	120	150
5	102	6	*****	*****	*****	*****	*****
15	73	4	*****	*****	*****	*****	*****
25	43	2	*****	*****	*****	*****	*****
35	43	2	*****	*****	*****	*****	*****
45	24	1	*****	*****	*****	*****	*****
55	27	1	*****	*****	*****	*****	*****
65	32	2	*****	*****	*****	*****	*****
75	20	1	*****	*****	*****	*****	*****
85	37	2	*****	*****	*****	*****	*****
95	28	2	*****	*****	*****	*****	*****
105	29	2	*****	*****	*****	*****	*****
115	20	1	*****	*****	*****	*****	*****
125	26	1	*****	*****	*****	*****	*****
135	31	2	*****	*****	*****	*****	*****
145	43	2	*****	*****	*****	*****	*****
155	70	4	*****	*****	*****	*****	*****
165	62	3	*****	*****	*****	*****	*****
175	136	8	*****	*****	*****	*****	*****
185	122	7	*****	*****	*****	*****	*****
195	137	8	*****	*****	*****	*****	*****
205	96	5	*****	*****	*****	*****	*****
215	90	5	*****	*****	*****	*****	*****
225	32	2	*****	*****	*****	*****	*****
235	39	2	*****	*****	*****	*****	*****
245	31	2	*****	*****	*****	*****	*****
255	11	1	****	*****	*****	*****	*****
265	22	1	*****	*****	*****	*****	*****
275	9	0	***	*****	*****	*****	*****
285	21	1	*****	*****	*****	*****	*****
295	23	1	*****	*****	*****	*****	*****
305	30	2	*****	*****	*****	*****	*****
315	25	1	*****	*****	*****	*****	*****
325	43	2	*****	*****	*****	*****	*****
335	75	4	*****	*****	*****	*****	*****
345	61	3	*****	*****	*****	*****	*****
355	91	5	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1804  
 SAMPLE INTERVAL = 15 MINUTES





STN. NO. HS-5S

DEPTH 3 M.

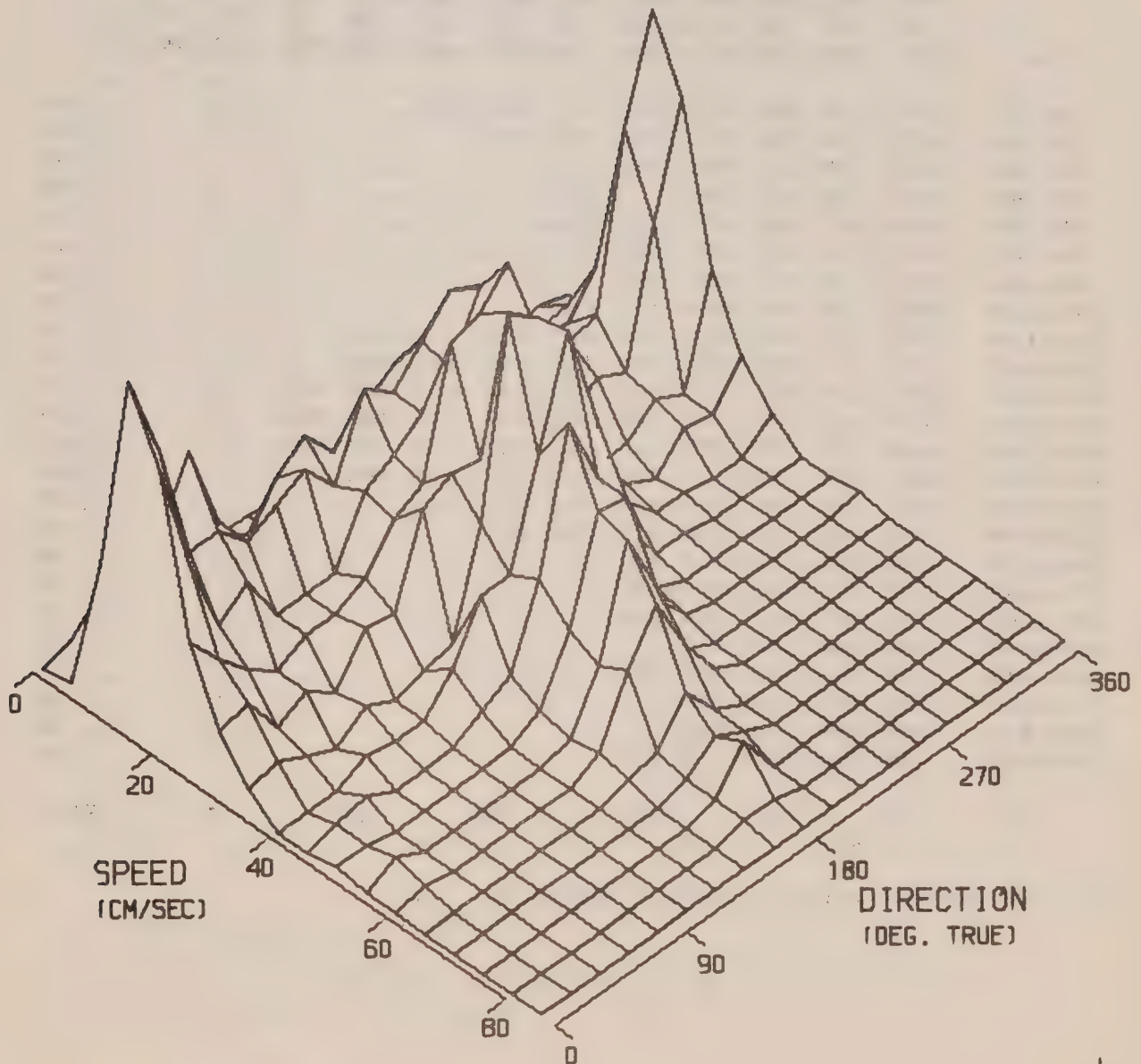
STARTING DATE: 5/ 2/73      ENDING DATE: 26/ 2/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 5/ 2/73

NO. OF SAMPLES = 2000



STN. NO. HS-55

DEPTH 3 M.

STARTING DATE: 5/ 2/73

SAMPLE INTERVAL = 15 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	004	039	040	015	002		002	002					104
15- 29	009	026	030	013	004	001	001						84
30- 44	005	020	016	007	002								50
45- 59	005	034	012	004		003							58
60- 74	008	020	009	005	001	001							44
75- 89	003	018	012	005	002	001							41
90-104	006	019	011	008	002								46
105-119	003	016	009	006	003	001							38
120-134	003	021	014	009	009	003	001						60
135-149	003	020	022	020	010	009	001	003	001				89
150-164	004	019	018	015	022	012	010	007	002	002			111
165-179	005	022	021	022	025	032	020	018	004	006			175
180-194	009	029	035	039	048	043	033	018	007	002			263
195-209	007	019	032	043	042	032	019	006	001				201
210-224	009	026	039	039	039	024	007	002					185
225-239	005	025	022	028	014	006	002						102
240-254	004	021	013	010	011								59
255-269	011	015	013	005	001								45
270-284	004	008	011	005	003								31
285-299	002	009	004	002									17
300-314	003	006	012	002	001								24
315-329	003	012	012	005									32
330-344	003	025	017	003									48
345-359	003	036	040	013	001								93
	121		464		242		96		15		0		2000
		505		323		168		56		10		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 3M. START DATE 05/02/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	40	80	120	160	200
13	15	1	*****				
39	41	2	*****				
65	64	3	*****				
91	111	6	*****				
117	177	9	*****				
143	196	10	*****				
169	194	10	*****				
195	142	7	*****				
221	127	6	*****				
247	104	5	*****				
273	124	6	*****				
299	98	5	*****				
325	86	4	*****				
351	85	4	*****				
377	71	4	*****				
403	63	3	*****				
429	58	3	*****				
455	46	2	*****				
481	48	2	*****				
507	28	1	*****				
533	28	1	*****				
559	23	1	*****				
585	24	1	*****				
611	19	1	*****				
637	7	0	**				
663	5	0	*				
689	4	0	*				
715	4	0	*				
741	5	0	*				
767	3	0	*				
793	0	0					
819	0	0					
845	0	0					
871	0	0					
897	0	0					
923	0	0					
949	0	0					
975	0	0					
1001	0	0					
1027	0	0					

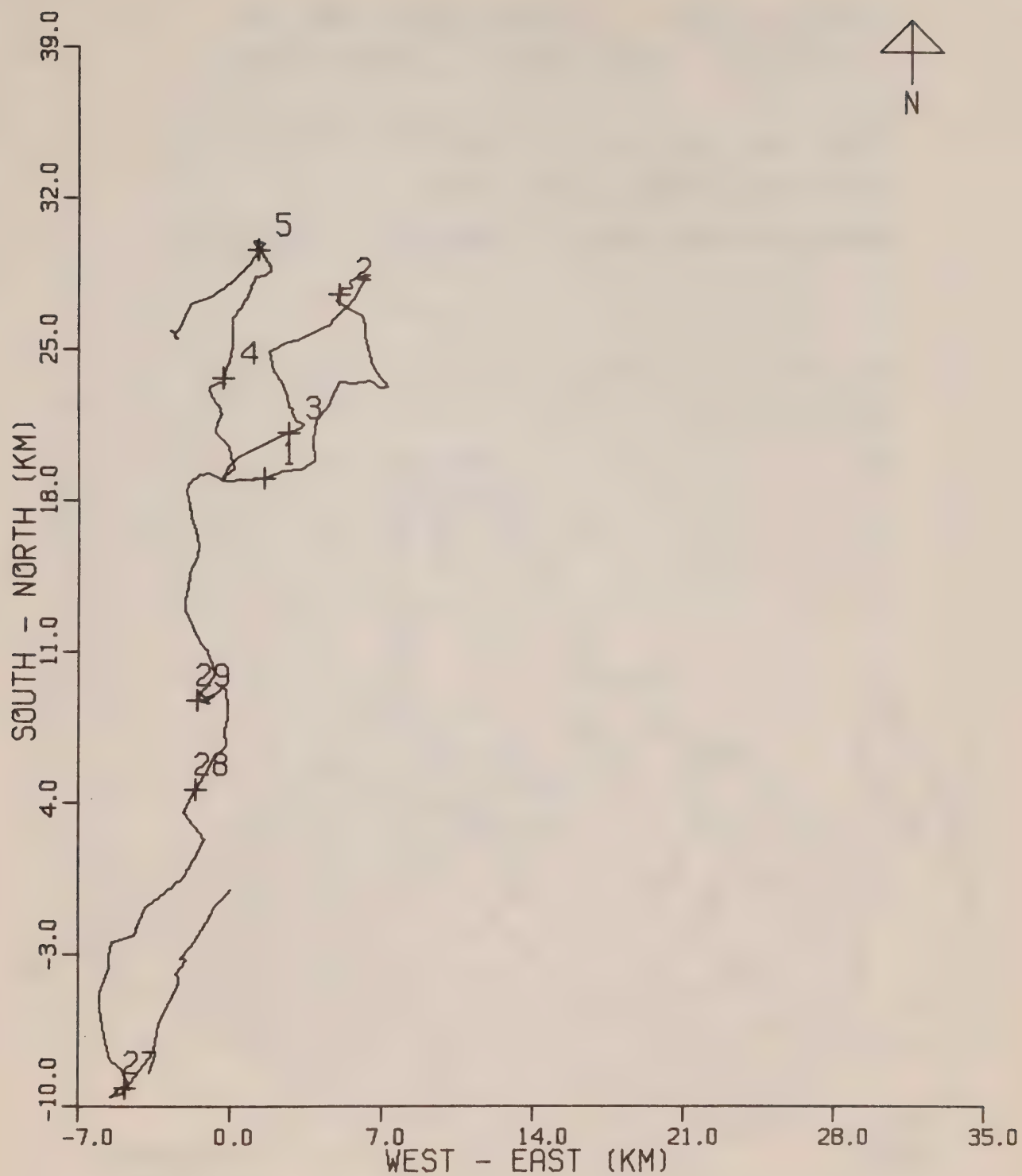
NO. OF SAMPLES OVER 1040 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2000  
 SAMPLE INTERVAL = 15 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 3M. START DATE 05/02/73

MEDIAN (DEG.T)	FREQUNCY NO.	PCT	40	80	120	160	200
5	70	4	*****				
15	75	4	*****				
25	43	2	*****				
35	42	2	*****				
45	28	1	*****				
55	38	2	*****				
65	40	2	*****				
75	17	1	****				
85	33	2	*****				
95	21	1	*****				
105	33	2	*****				
115	25	1	*****				
125	44	2	*****				
135	37	2	*****				
145	68	3	*****				
155	80	4	*****				
165	88	4	*****				
175	161	8	*****				
185	131	7	*****				
195	166	8	*****				
205	124	6	*****				
215	160	8	*****				
225	74	4	*****				
235	53	3	*****				
245	48	2	*****				
255	27	1	*****				
265	35	2	*****				
275	19	1	*****				
285	11	1	***				
295	12	1	***				
305	20	1	*****				
315	13	1	***				
325	23	1	*****				
335	36	2	*****				
345	43	2	*****				
355	62	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2000  
 SAMPLE INTERVAL = 15 MINUTES



STN. NO. HS-5S

DEPTH 3 M.

STARTING DATE: 26/ 2/73      ENDING DATE: 5/ 3/73

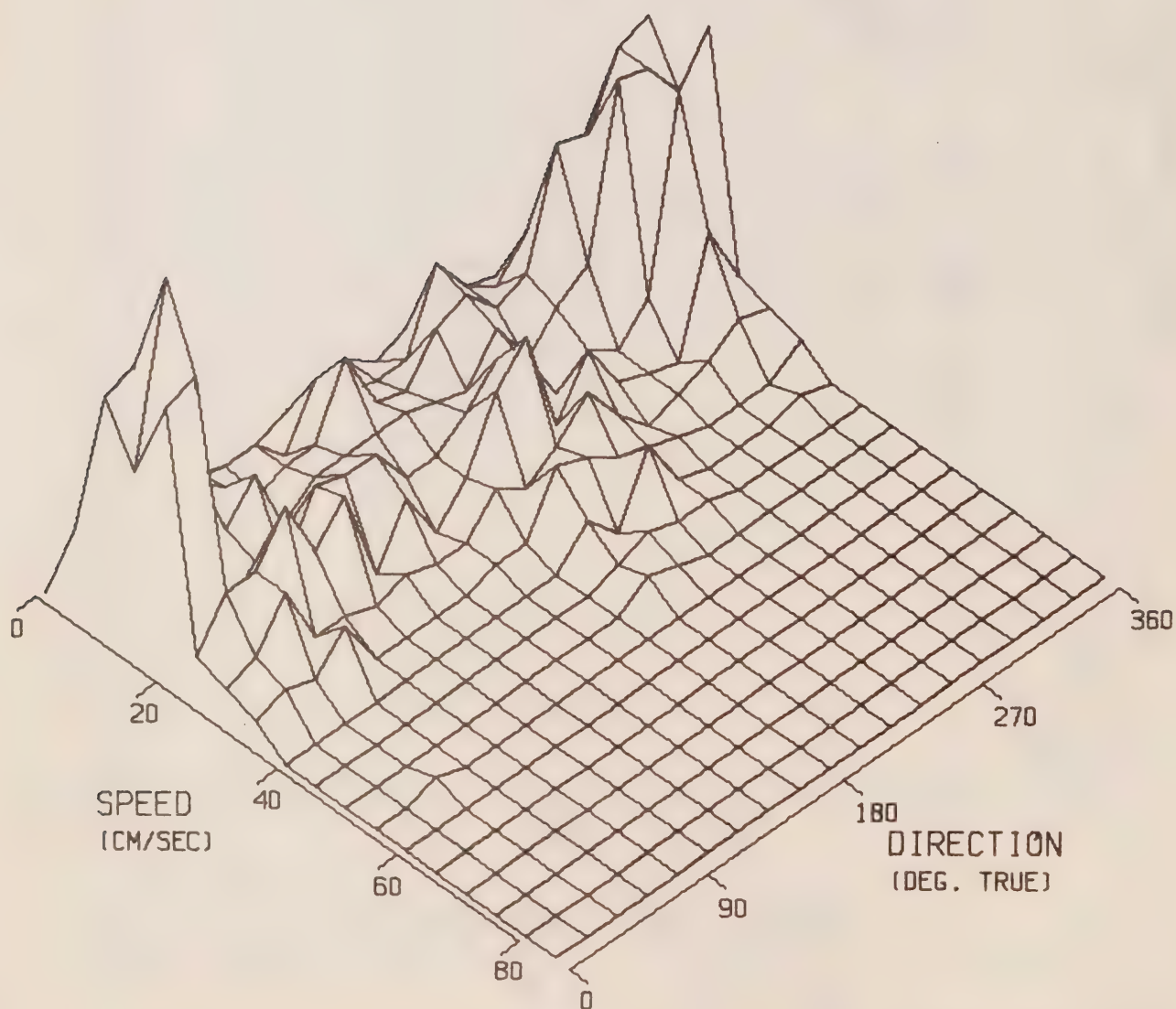


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 26/ 2/73

NO. OF SAMPLES = 798



STN. NO. HS-5S      DEPTH    3 M.

STARTING DATE: 26/ 2/73  
SAMPLE INTERVAL = 15 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

DIR	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	010	035	037	003	003							001	89
15- 29	005	027	028	009	001								70
30- 44	006	017	009	009	002								43
45- 59	009	011	004	008	004		001						37
60- 74	007	007	011	005	001								31
75- 89	002	007	005	006									20
90-104	004	005	007	005	001								22
105-119	005	005	011	003									24
120-134	001	005	004										10
135-149	001	008	008	003									20
150-164	006	008	002	001	001								18
165-179	003	008	003	002									16
180-194	007	005	006	007	005	001	001						32
195-209	001	005	005	007	003	002	001						24
210-224		007	006	008	004	002	001						28
225-239	007	004	012	011	003	002							39
240-254	006	011	006	003	006	001							33
255-269	004	005	002	005	001	002							19
270-284	004	006	004	002									16
285-299	006	011	001		001								19
300-314	005	012	002	002									21
315-329	003	027	012	002									44
330-344	010	024	021	005									60
345-359	010	023	019	007	002								61
	122		225		38		4		0		0		796
		283		113		10		0		0		1	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 2

## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 3M. START DATE 26/02/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	20	40	60	80	100
8	2	0	*				
24	17	2	*****				
40	19	2	*****				
56	38	5	*****				
72	49	6	*****				
88	47	6	*****				
104	60	8	*****				
120	66	8	*****				
136	57	7	*****				
152	56	7	*****				
168	47	6	*****				
184	54	7	*****				
200	45	6	*****				
216	36	5	*****				
232	40	5	*****				
248	29	4	*****				
264	28	4	*****				
280	18	2	*****				
296	22	3	*****				
312	13	2	*****				
328	9	1	*****				
344	14	2	*****				
360	8	1	****				
376	4	1	**				
392	4	1	**				
408	2	0	*				
424	2	0	*				
440	4	1	**				
456	0	0					
472	1	0	*				
488	1	0	*				
504	2	0	*				
520	0	0					
536	1	0	*				
552	0	0					
568	0	0					
584	0	0					
600	0	0					
616	0	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 798  
 SAMPLE INTERVAL = 15 MINUTES

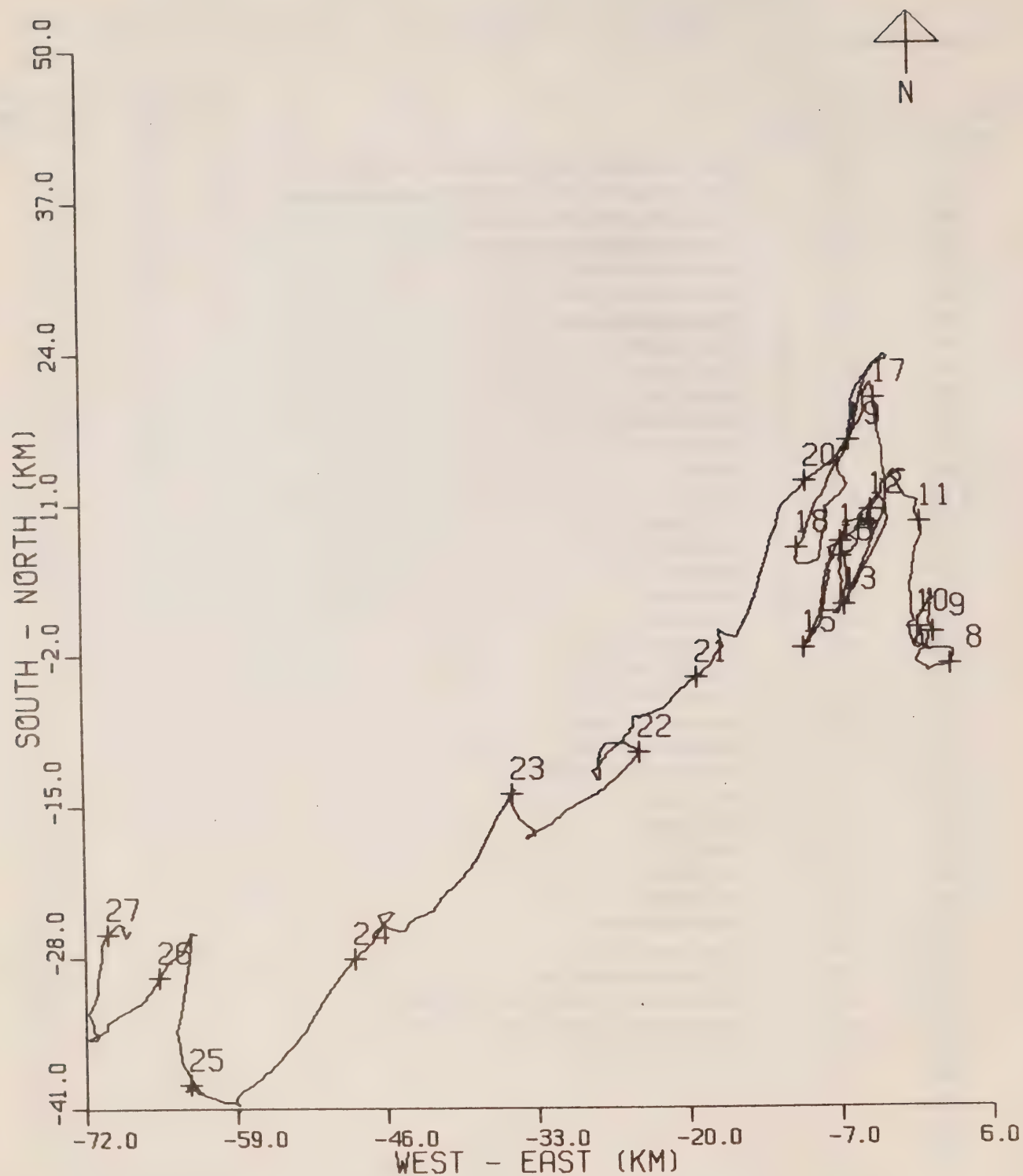


## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 3M. START DATE 26/02/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	20	40	60	80	100
5	53	7	*****	*****	*****	*****	*****
15	61	8	*****	*****	*****	*****	*****
25	45	6	*****	*****	*****	*****	*****
35	35	4	*****	*****	*****	*****	*****
45	22	3	*****	*****	*****	*****	*****
55	23	3	*****	*****	*****	*****	*****
65	24	3	*****	*****	*****	*****	*****
75	15	2	*****	*****	*****	*****	*****
85	15	2	*****	*****	*****	*****	*****
95	14	2	*****	*****	*****	*****	*****
105	15	2	*****	*****	*****	*****	*****
115	15	2	*****	*****	*****	*****	*****
125	7	1	*****	*****	*****	*****	*****
135	10	1	*****	*****	*****	*****	*****
145	13	2	*****	*****	*****	*****	*****
155	15	2	*****	*****	*****	*****	*****
165	12	2	*****	*****	*****	*****	*****
175	12	2	*****	*****	*****	*****	*****
185	12	2	*****	*****	*****	*****	*****
195	20	3	*****	*****	*****	*****	*****
205	19	2	*****	*****	*****	*****	*****
215	22	3	*****	*****	*****	*****	*****
225	22	3	*****	*****	*****	*****	*****
235	23	3	*****	*****	*****	*****	*****
245	27	3	*****	*****	*****	*****	*****
255	13	2	*****	*****	*****	*****	*****
265	14	2	*****	*****	*****	*****	*****
275	7	1	*****	*****	*****	*****	*****
285	14	2	*****	*****	*****	*****	*****
295	13	2	*****	*****	*****	*****	*****
305	20	3	*****	*****	*****	*****	*****
315	18	2	*****	*****	*****	*****	*****
325	27	3	*****	*****	*****	*****	*****
335	48	6	*****	*****	*****	*****	*****
345	44	6	*****	*****	*****	*****	*****
355	29	4	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 798  
 SAMPLE INTERVAL = 15 MINUTES



STN. NO. HS-5S

DEPTH 3 M.

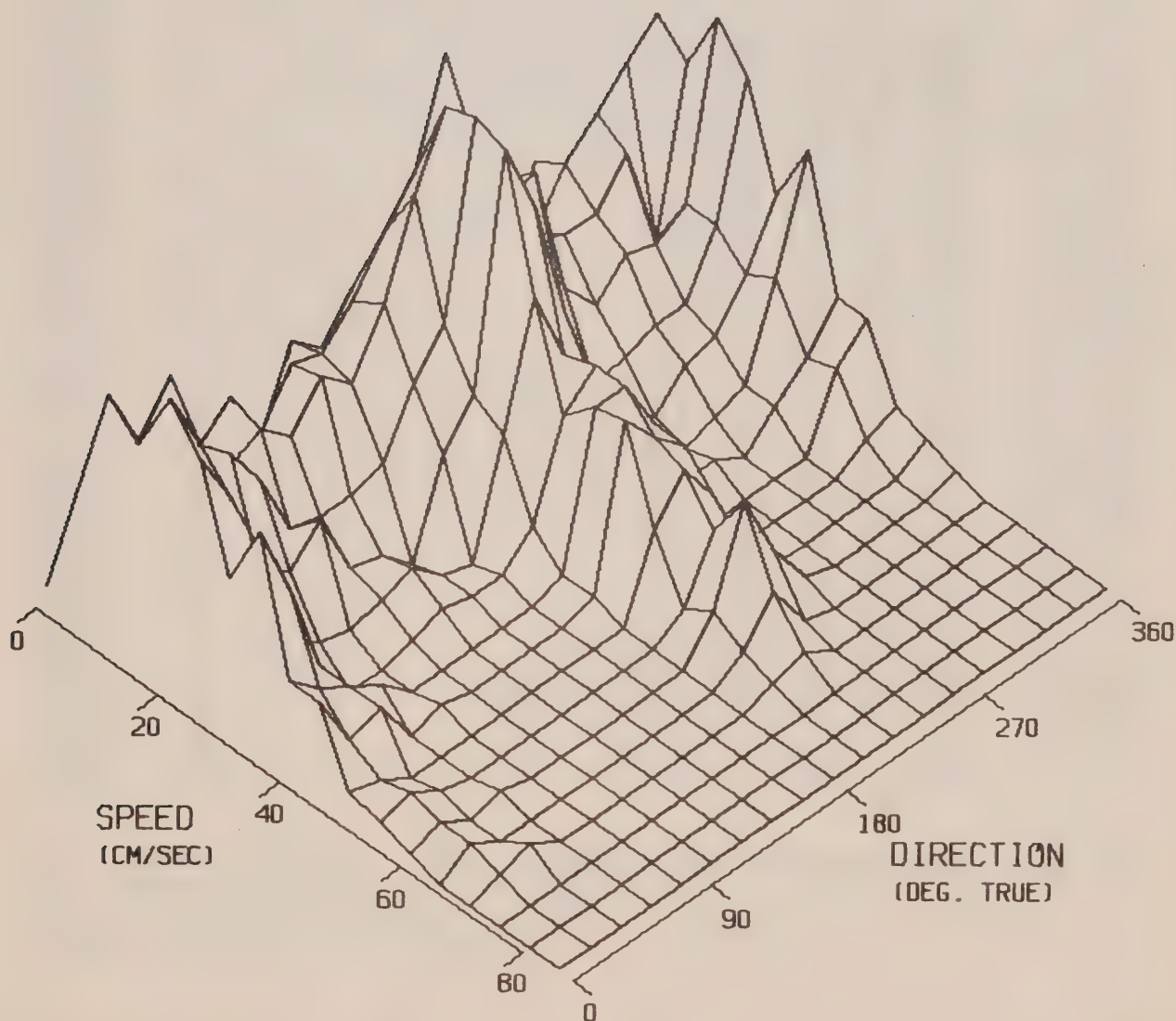
STARTING DATE: 7/ 3/73 ENDING DATE: 27/ 3/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 7/ 3/73

NO. OF SAMPLES = 1917





STN. NO. HS-58 DEPTH 3 M.

STARTING DATE: 7/ 3/73  
SAMPLE INTERVAL = 15 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	020	022	034	027	026	014	004	004					151
15- 29	008	029	031	026	015	006	003	002	001	001			122
30- 44	003	021	022	012	007	004	001		002				72
45- 59	005	023	015	006	001	003		001					54
60- 74	011	017	018	005	002	002							55
75- 89	005	017	012	007									41
90-104	013	009	012	002	001								37
105-119	008	021	012	006	001								48
120-134	006	023	006	002	002								39
135-149	013	016	011	001	001								42
150-164	010	021	020	003	001								55
165-179	013	027	023	005	002								70
180-194	011	032	033	021	006	008	002	001					114
195-209	008	041	043	035	020	020	006	005	001				179
210-224	017	040	037	020	015	019	014	009	005				176
225-239	011	035	026	021	018	016	012	010	002				151
240-254	005	025	024	015	009	005	002	003	001				89
255-269	011	018	017	005	004								55
270-284	007	014	011	005	003								40
285-299	012	016	013	005									46
300-314	013	018	017	006	003								57
315-329	004	023	014	010	003	002							56
330-344	006	021	011	011	010	007	001						67
345-359	007	028	019	020	018	008	001						101
	227		481		168		46		12		0		1917
		557		276		114		35		1		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 3M, START DATE 07/03/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	40	80	120	160	200
9	9	0	•	•	•	•	•
27	38	2	*****				
45	68	4	*****				
63	76	4	*****				
81	107	6	*****				
99	126	7	*****				
117	140	7	*****				
135	113	6	*****				
153	134	7	*****				
171	125	7	*****				
189	125	7	*****				
207	96	5	*****				
225	87	5	*****				
243	79	4	*****				
261	77	4	*****				
279	63	3	*****				
297	53	3	*****				
315	41	2	*****				
333	34	2	*****				
351	44	2	*****				
369	40	2	*****				
387	29	2	*****				
405	26	1	*****				
423	31	2	*****				
441	23	1	*****				
459	28	1	*****				
477	15	1	****				
495	18	1	*****				
513	6	0	**				
531	8	0	**				
549	10	1	***				
567	4	0	*				
585	17	1	****				
603	7	0	**				
621	4	0	*				
639	4	0	*				
657	4	0	*				
675	2	0	*				
693	3	0	*				
711	3	0	*				

NO. OF SAMPLES OVER 720 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1917  
 SAMPLE INTERVAL = 15 MINUTES

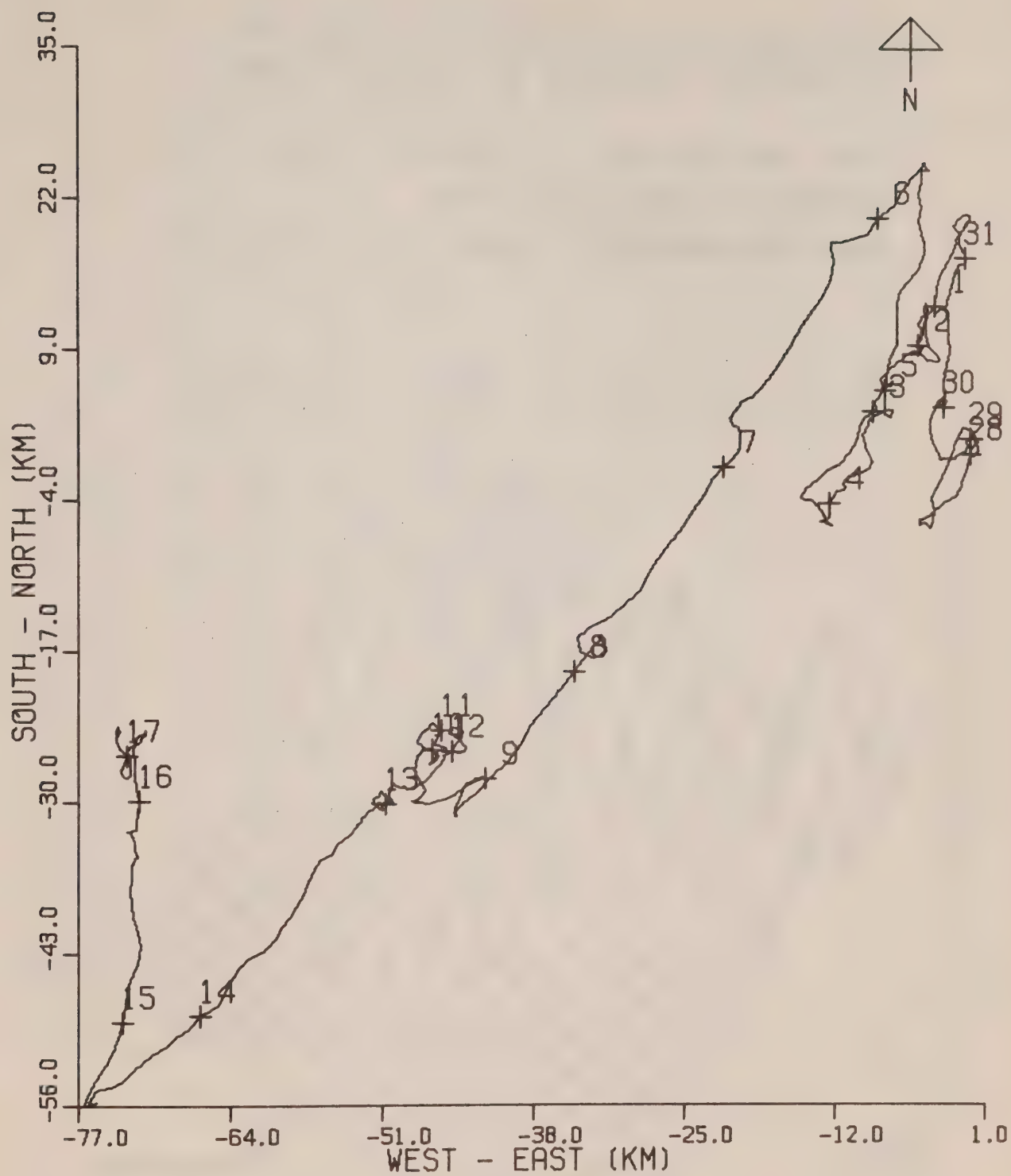
## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 3M. START DATE 07/03/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	30	60	90	120	150
5	123	6	*****				
15	72	4	*****				
25	83	4	*****				
35	53	3	*****				
45	39	2	*****				
55	36	2	*****				
65	30	2	*****				
75	31	2	*****				
85	35	2	*****				
95	23	1	*****				
105	31	2	*****				
115	28	1	*****				
125	27	1	*****				
135	28	1	*****				
145	26	1	*****				
155	32	2	*****				
165	44	2	*****				
175	49	3	*****				
185	66	3	*****				
195	102	5	*****				
205	128	7	*****				
215	114	6	*****				
225	128	7	*****				
235	89	5	*****				
245	59	3	*****				
255	43	2	*****				
265	31	2	*****				
275	30	2	*****				
285	24	1	*****				
295	36	2	*****				
305	39	2	*****				
315	33	2	*****				
325	43	2	*****				
335	43	2	*****				
345	56	3	*****				
355	63	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1917  
 SAMPLE INTERVAL = 15 MINUTES





STN. NO. HS-5S

DEPTH 3 M.

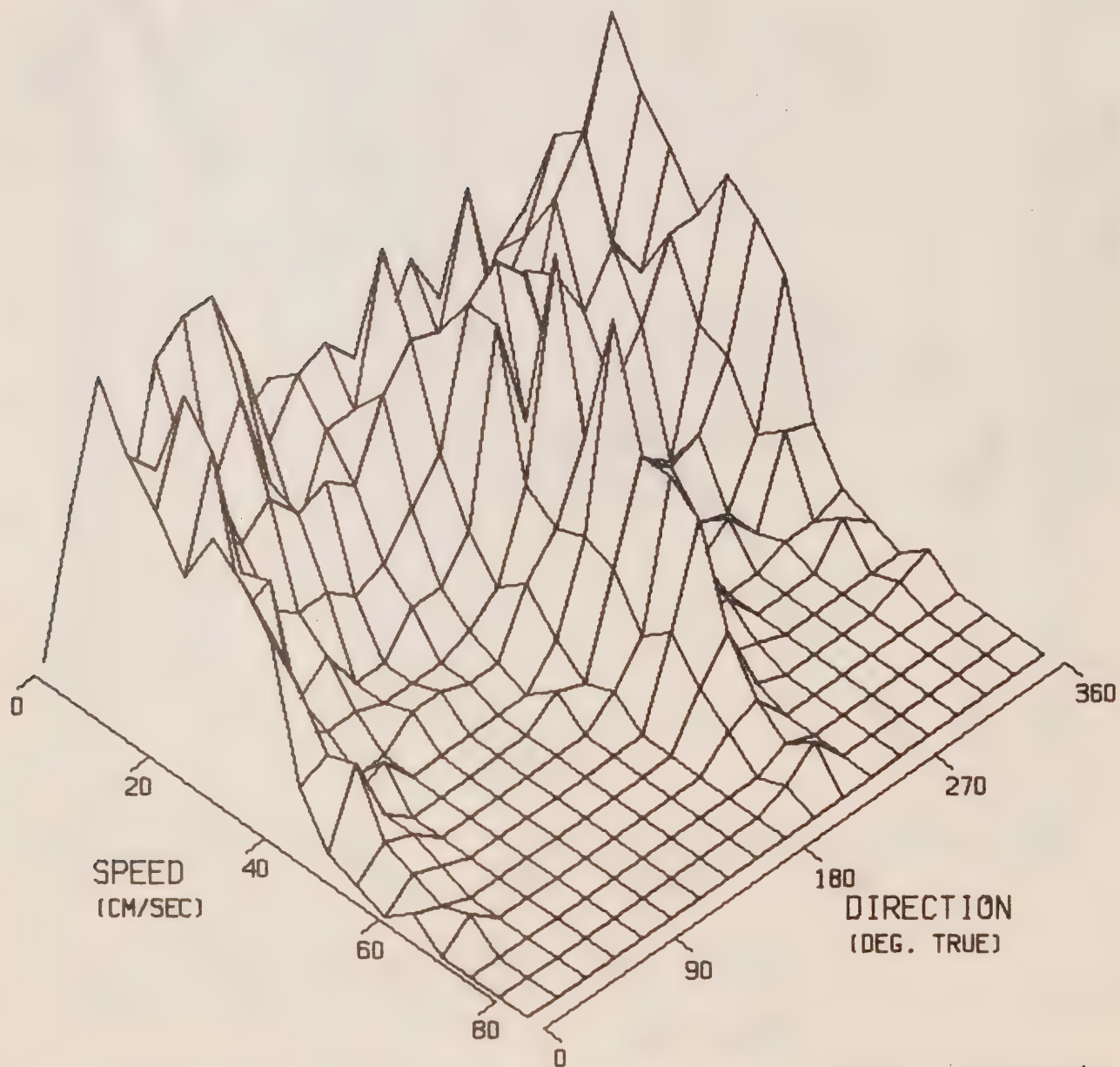
STARTING DATE: 27/ 3/73      ENDING DATE: 17/ 4/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 27/ 3/73

NO. OF SAMPLES = 2000



STN. NO. HS-55 DEPTH 3 M.

STARTING DATE: 27/ 3/73  
SAMPLE INTERVAL = 15 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	015	025	018	027	021	015	006	002	001				130
15- 29	010	027	036	025	018	006	006	002	001	001			132
30- 44	008	025	026	016	010	002	002	001					90
45- 59	014	031	016	011		002	002						76
60- 74	016	031	014	004	003	002							70
75- 89	011	026	018	007	002								64
90-104	012	016	015	004	002								49
105-119	015	016	016	003	002	002							54
120-134	010	014	015	002									41
135-149	012	022	013	008	002								57
150-164	011	018	022	005	002		002						60
165-179	009	025	021	008	003	001	002						69
180-194	007	023	024	015	010	007	003	001	001				91
195-209	009	020	022	029	010	013	008	010	005	001		001	128
210-224	010	021	026	020	027	029	023	019	004	001			180
225-239	005	017	027	027	012	014	012	011	001	003			129
240-254	010	022	028	013	011	010	006						100
255-269	003	020	013	011	005	004	003	001					60
270-284	006	017	012	008	006	001							50
285-299	013	013	017	004	003	002							52
300-314	007	022	015	006	004	002							56
315-329	014	026	022	005	003		001						71
330-344	009	024	018	013	010	004	001	002					81
345-359	009	028	018	019	024	008	003		001				110
	245		472		190		80		14		0		2000
		529		290		124		49		6		1	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 3M, START DATE 27/03/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT .	40	80	120	160	200
10	20	1	*****				
30	46	2	*****				
50	74	4	*****				
70	112	6	*****				
90	133	7	*****				
110	146	7	*****				
130	133	7	*****				
150	116	6	*****				
170	119	6	*****				
190	132	7	*****				
210	114	6	*****				
230	106	5	*****				
250	88	4	*****				
270	77	4	*****				
290	53	3	*****				
310	72	4	*****				
330	66	3	*****				
350	46	2	*****				
370	40	2	*****				
390	36	2	*****				
410	27	1	*****				
430	37	2	*****				
450	38	2	*****				
470	20	1	*****				
490	16	1	****				
510	30	2	*****				
530	25	1	*****				
550	9	0	**				
570	13	1	***				
590	8	0	**				
610	16	1	****				
630	12	1	***				
650	3	0	*				
670	5	0	*				
690	3	0	*				
710	2	0	*				
730	2	0	*				
750	0	0					
770	2	0	*				
790	2	0	*				

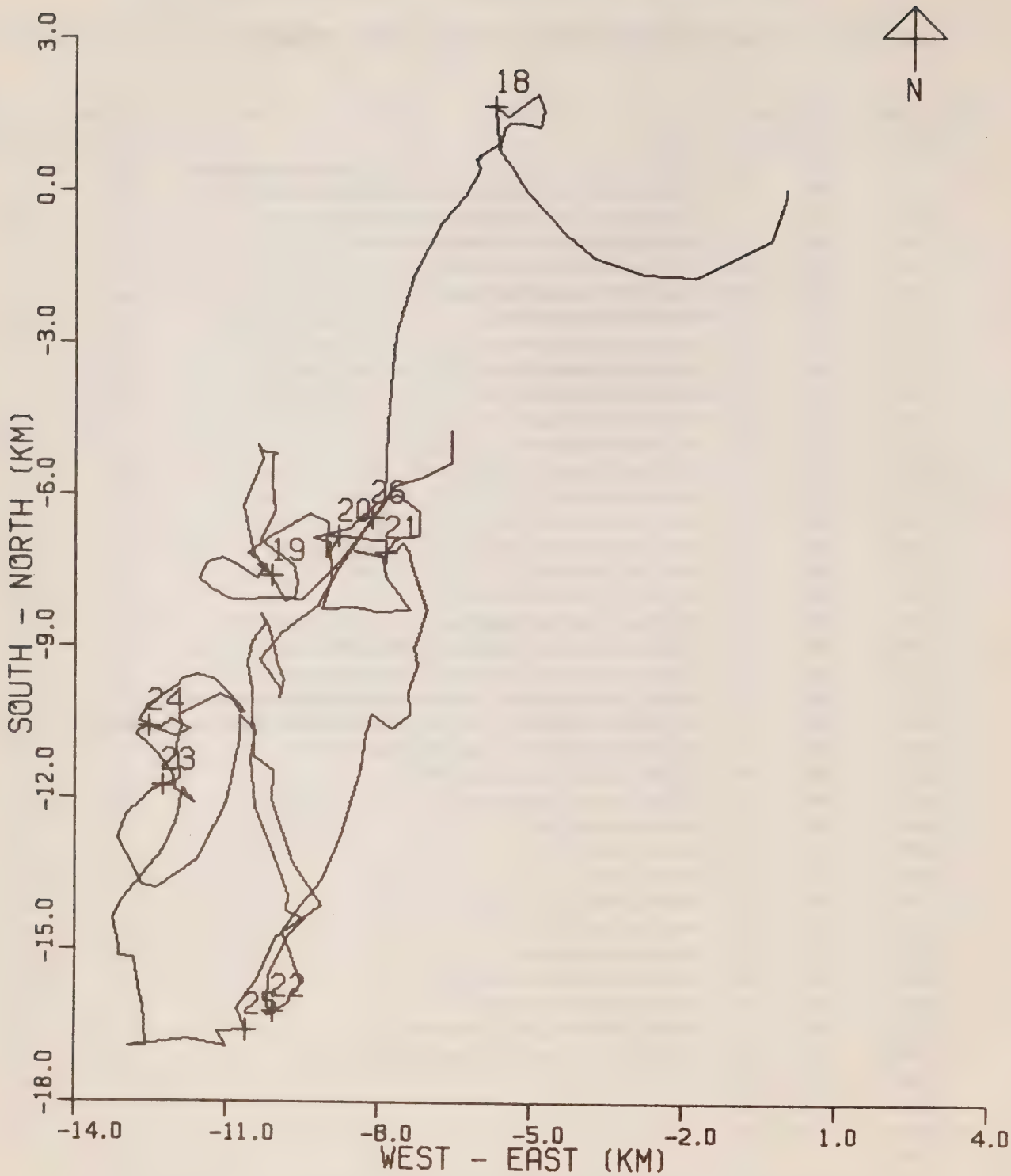
NO. OF SAMPLES OVER 800 = 1  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2000  
 SAMPLE INTERVAL = 15 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 3M. START DATE 27/03/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	30	60	90	120	150
5	101	5	*****	.	.	.	.
15	91	5	*****				
25	75	4	*****				
35	64	3	*****				
45	51	3	*****				
55	52	3	*****				
65	43	2	*****				
75	46	2	*****				
85	43	2	*****				
95	37	2	*****				
105	33	2	*****				
115	32	2	*****				
125	29	1	*****				
135	30	2	*****				
145	41	2	*****				
155	43	2	*****				
165	35	2	*****				
175	50	3	*****				
185	57	3	*****				
195	74	4	*****				
205	91	5	*****				
215	108	5	*****				
225	126	6	*****				
235	78	4	*****				
245	64	3	*****				
255	54	3	*****				
265	36	2	*****				
275	35	2	*****				
285	23	1	*****				
295	46	2	*****				
305	34	2	*****				
315	38	2	*****				
325	56	3	*****				
335	46	2	*****				
345	61	3	*****				
355	77	4	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2000  
 SAMPLE INTERVAL = 15 MINUTES



STN. NO. HS-5S

DEPTH 3 M.

STARTING DATE: 17/ 4/73

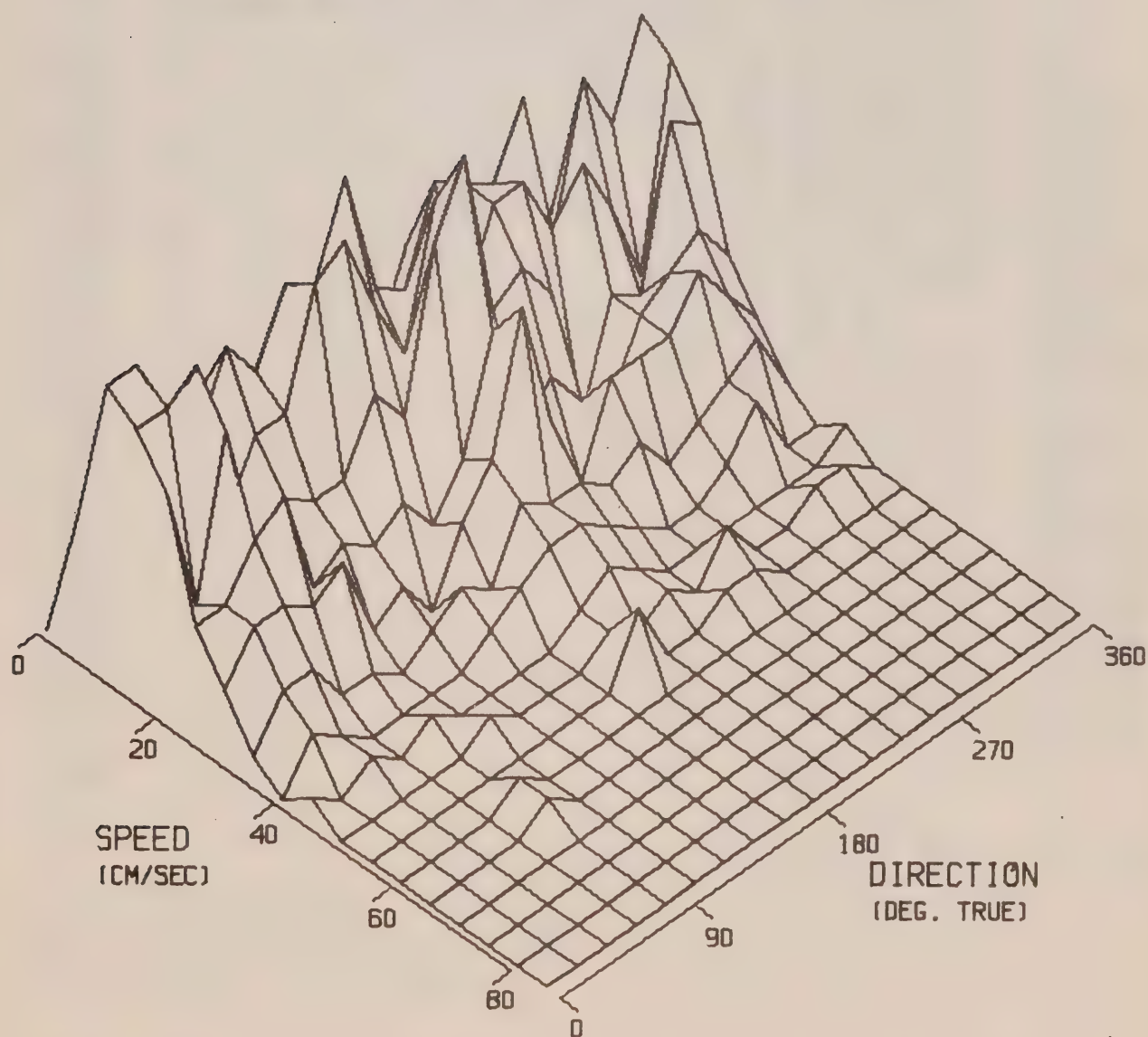
ENDING DATE: 26/ 4/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 17/ 4/73

NO. OF SAMPLES = 854





STN. NO. HS-58 DEPTH 3 M.

STARTING DATE: 17/ 4/73  
SAMPLE INTERVAL = 15 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	010	013	015	006		002							46
15- 29	003	018	005	006	003	001							36
30- 44	007	011	015	006	003	002							44
45- 59	007	005	010	010									32
60- 74	007	010	008	008	001			001					35
75- 89	009	012	004	004	001	001		001					32
90-104	007	015	006	003	001								32
105-119	003	010	005	002	001		001						22
120-134	007	013	009	004	001								34
135-149		018	007	002	002	001							30
150-164	006	017	006	002	002								33
165-179	008	009	008	005	005		001						36
180-194	004	010	016	005	004	002	002	001					44
195-209	005	013	017	019	004	003							61
210-224	005	011	009	005	004	002	001						37
225-239	008	017	009	005		001							40
240-254	010	010	007	003	003		001	001					35
255-269	005	016	010	006	002	001	001						41
270-284	004	012	003	005									24
285-299	005	011	003	004	002								25
300-314	001	011	007	008	003								30
315-329	005	014	005	007	005	001	001						38
330-344	006	006	014	005	005		001						37
345-359	001	016	006	004	003								30
	133		204		55		9		0		0		854
		298		134		17		4		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-59 DEPTH 3M. START DATE 17/04/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	20	40	60	80	100
8	6	1	***	.	.	.	.
24	11	1	*****				
40	23	3	*****				
56	53	6	*****				
72	44	5	*****				
88	47	6	*****				
104	73	9	*****				
120	64	7	*****				
136	71	8	*****				
152	43	5	*****				
168	47	6	*****				
184	48	6	*****				
200	39	5	*****				
216	43	5	*****				
232	26	3	*****				
248	34	4	*****				
264	25	3	*****				
280	23	3	*****				
296	24	3	*****				
312	28	3	*****				
328	17	2	*****				
344	11	1	*****				
360	10	1	*****				
376	9	1	*****				
392	6	1	***				
408	5	1	***				
424	4	0	**				
440	3	0	**				
456	3	0	**				
472	2	0	*				
488	1	0	*				
504	3	0	**				
520	1	0	*				
536	2	0	*				
552	1	0	*				
568	2	0	*				
584	0	0					
600	1	0	*				
616	0	0					
632	1	0	*				

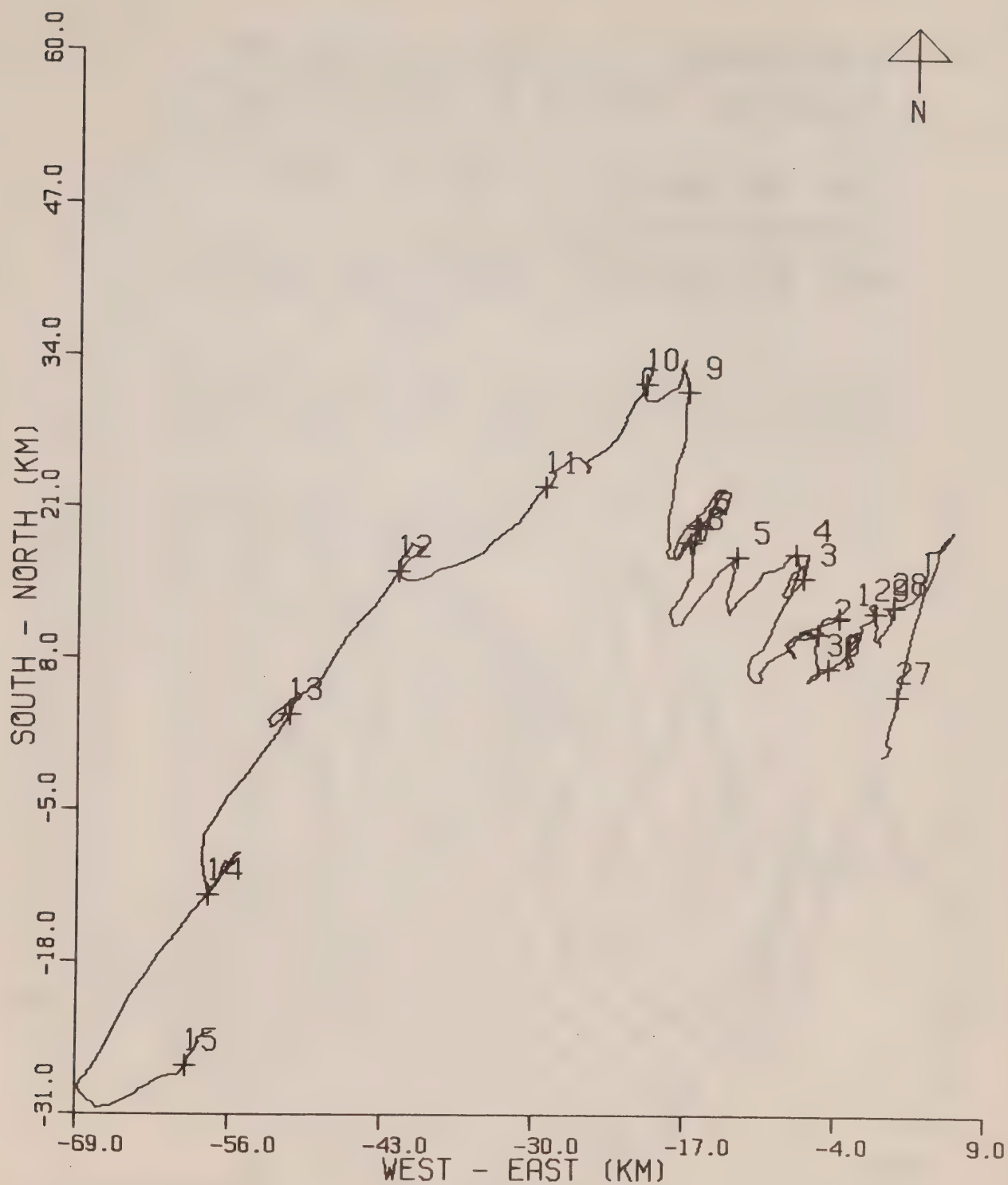
NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 854  
 SAMPLE INTERVAL = 15 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 3M. START DATE 17/04/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	10	20	30	40	50
5	33	4	*****				
15	25	3	*****				
25	25	3	*****				
35	36	4	*****				
45	23	3	*****				
55	20	2	*****				
65	20	2	*****				
75	27	3	*****				
85	18	2	*****				
95	20	2	*****				
105	17	2	*****				
115	16	2	*****				
125	23	3	*****				
135	23	3	*****				
145	20	2	*****				
155	23	3	*****				
165	24	3	*****				
175	27	3	*****				
185	29	3	*****				
195	35	4	*****				
205	36	4	*****				
215	27	3	*****				
225	24	3	*****				
235	29	3	*****				
245	22	3	*****				
255	25	3	*****				
265	25	3	*****				
275	16	2	*****				
285	16	2	*****				
295	16	2	*****				
305	22	3	*****				
315	14	2	*****				
325	34	4	*****				
335	28	3	*****				
345	18	2	*****				
355	18	2	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 854  
 SAMPLE INTERVAL = 15 MINUTES



STN. NO. HS-5S

DEPTH 3 M.

STARTING DATE: 26/ 4/73      ENDING DATE: 15/ 5/73

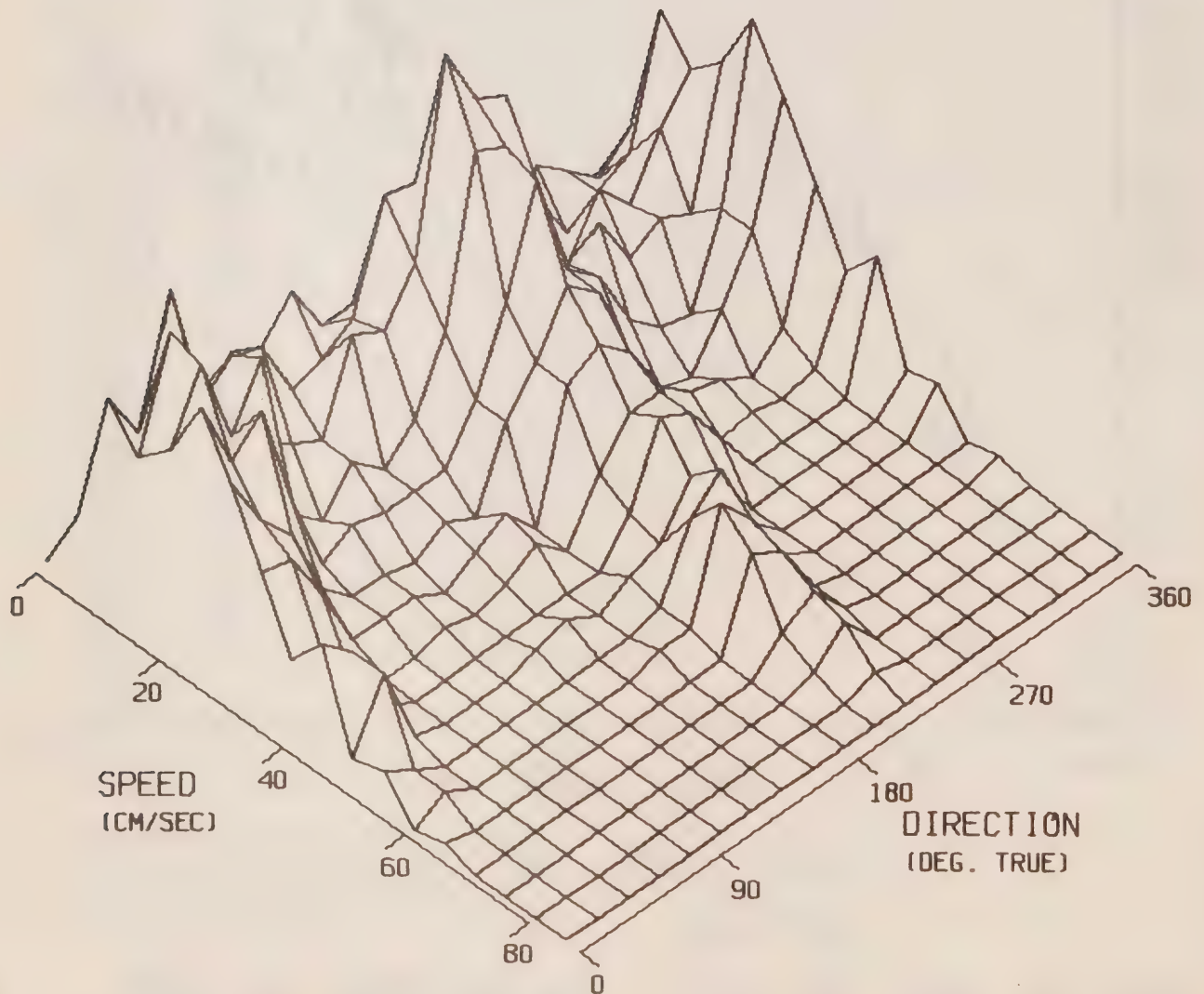


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 26/ 4/73

NO. OF SAMPLES = 1805



STN. NO. HS-5S DEPTH 3 M.

STARTING DATE: 26/ 4/73  
SAMPLE INTERVAL = 15 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	006	015	031	034	020	016	005	004					131
15- 29	009	029	034	026	016	009	008	002					133
30- 44	011	028	026	022	012	004	001						104
45- 59	011	028	030	015	001								85
60- 74	005	022	020	007	002								56
75- 89	010	018	007	003	001								39
90-104	015	014	006	005	003								43
105-119	013	018	006	004	001								42
120-134	007	007	006	001	002		001						24
135-149	015	022	005	004	001		002						49
150-164	005	016	012	002	005			001					41
165-179	012	022	010	002	004								50
180-194	011	024	029	012	001	001	003	002					83
195-209	011	039	038	018	016	004	005	017	006	001			155
210-224	015	037	038	029	014	014	009	014	013	004	001		188
225-239	013	032	020	025	018	019	007	004	001	001			140
240-254	009	028	029	016	011	008	003	001					105
255-269	007	019	018	008	005	002							59
270-284	005	017	012	003	005								42
285-299	012	013	013	002	001	001							42
300-314	007	005	009	004	001								26
315-329	007	007	012	003									29
330-344	004	016	016	011	004								51
345-359	008	028	021	012	010	007	002						88
	228	448	154	46	20	1	0	1805					
	504	268	85	45	6	0							

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 3M, START DATE 26/04/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	40	80	120	160	200
10	21	1	*****				
30	54	3	*****				
50	70	4	*****				
70	88	5	*****				
90	132	7	*****				
110	114	6	*****				
130	124	7	*****				
150	138	8	*****				
170	139	8	*****				
190	112	6	*****				
210	103	6	*****				
230	93	5	*****				
250	84	5	*****				
270	62	3	*****				
290	66	4	*****				
310	50	3	*****				
330	53	3	*****				
350	48	3	*****				
370	27	1	*****				
390	25	1	*****				
410	20	1	*****				
430	20	1	*****				
450	24	1	*****				
470	21	1	*****				
490	16	1	****				
510	13	1	***				
530	5	0	*				
550	13	1	***				
570	17	1	****				
590	10	1	***				
610	8	0	**				
630	8	0	**				
650	7	0	**				
670	6	0	**				
690	5	0	*				
710	2	0	*				
730	5	0	*				
750	0	0					
770	1	0					
790	0	0					

NO. OF SAMPLES OVER 800 = 1  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1805  
 SAMPLE INTERVAL = 15 MINUTES

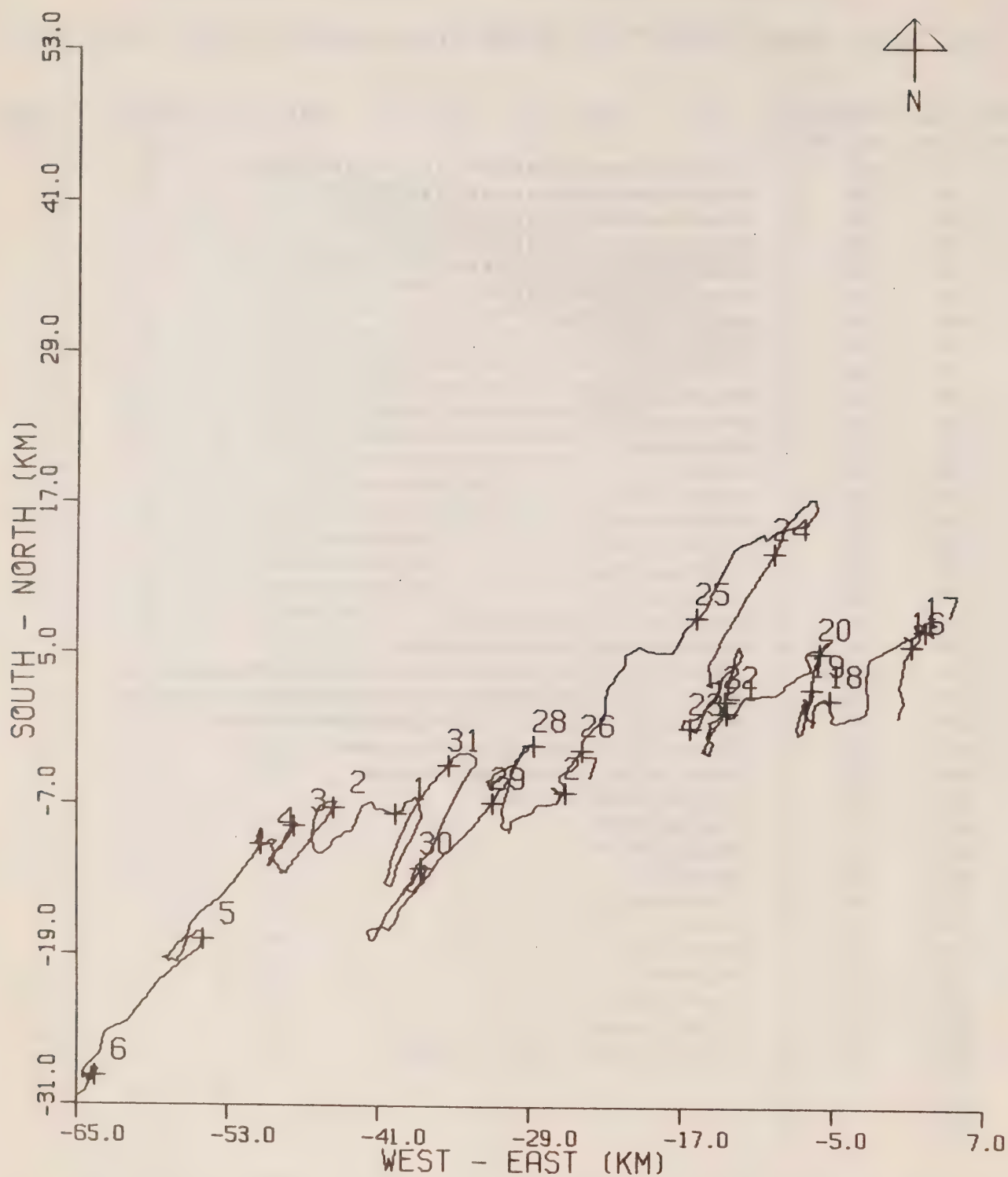
## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5S DEPTH 3M. START DATE 26/04/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	30	60	90	120	150
5	101	6	*****				
15	85	5	*****				
25	85	5	*****				
35	75	4	*****				
45	59	3	*****				
55	54	3	*****				
65	40	2	*****				
75	26	1	*****				
85	24	1	*****				
95	32	2	*****				
105	26	1	*****				
115	27	1	*****				
125	16	1	*****				
135	30	2	*****				
145	30	2	*****				
155	26	1	*****				
165	32	2	*****				
175	31	2	*****				
185	59	3	*****				
195	68	4	*****				
205	126	7	*****				
215	122	7	*****				
225	108	6	*****				
235	83	5	*****				
245	79	4	*****				
255	53	3	*****				
265	34	2	*****				
275	29	2	*****				
285	23	1	*****				
295	29	2	*****				
305	16	1	*****				
315	23	1	*****				
325	20	1	*****				
335	27	1	*****				
345	37	2	*****				
355	70	4	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1805  
 SAMPLE INTERVAL = 15 MINUTES





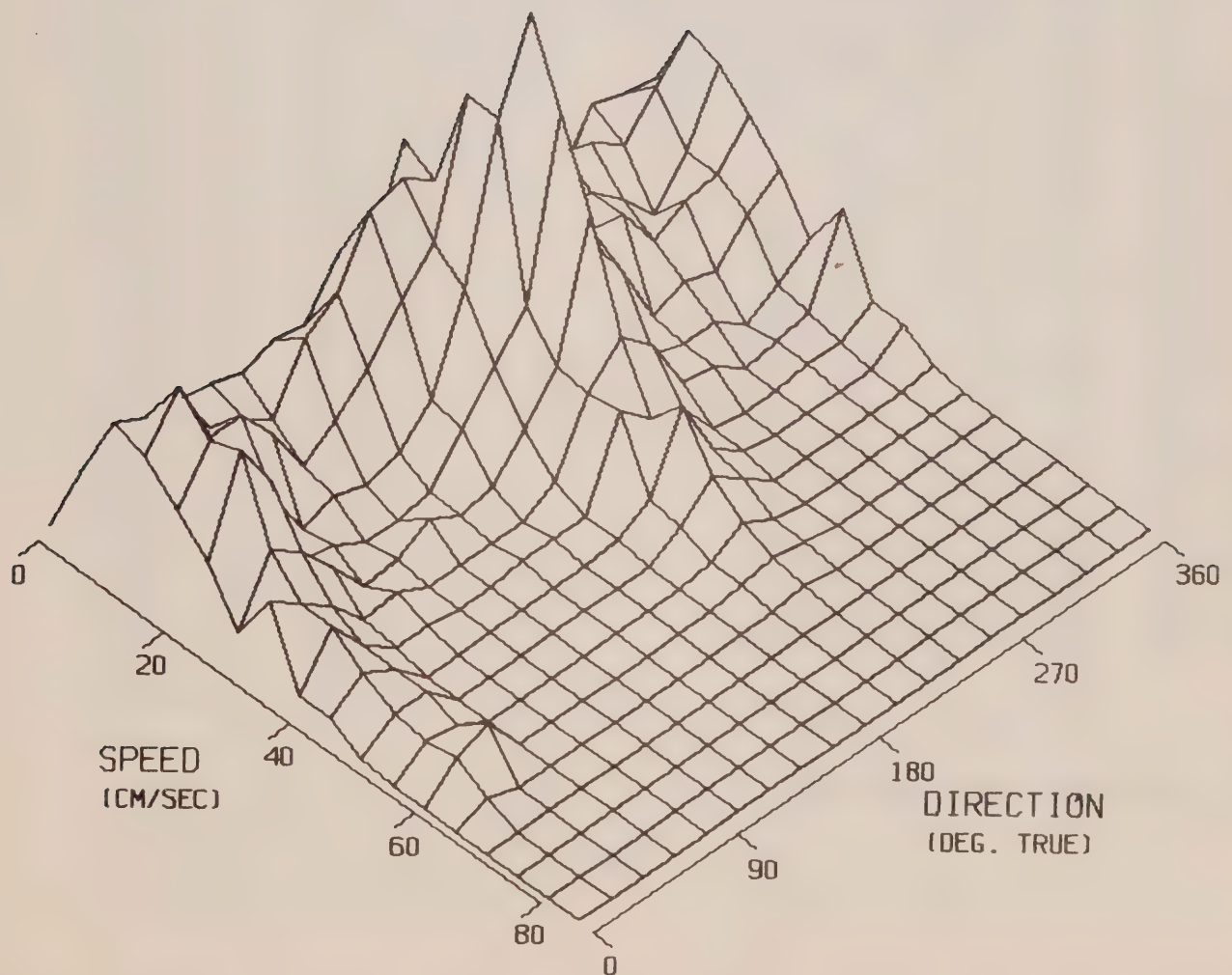
STN. NO. HS-5S

DEPTH 3 M.

STARTING DATE: 15/ 5/73      ENDING DATE: 6/ 6/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.  
STARTING DATE: 15/ 5/73  
NO. OF SAMPLES = 2108



STN. NO. HS-58 DEPTH 3 M.

STARTING DATE: 15/ 5/73  
SAMPLE INTERVAL = 15 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

DIR	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	015	034	030	022	018	009	002						130
15- 29	016	029	035	026	014	011	005	006	001				143
30- 44	013	033	021	022	011	008	010	007					125
45- 59	010	026	020	012	003	001							72
60- 74	014	021	004	005	002								46
75- 89	011	019	006	001	003								40
90-104	015	008	002										25
105-119	014	016	004	004									38
120-134	010	023	001	001									35
135-149	014	024	007	001	001								47
150-164	018	032	010	002	001								63
165-179	015	047	020	016	001	001							100
180-194	019	039	037	010	003	003	001						112
195-209	030	048	053	025	021	009	002						188
210-224	025	041	069	052	029	016	007	004	001				244
225-239	020	031	056	031	013	010	007	002					170
240-254	014	032	033	017	012	004	001						113
255-269	013	026	017	013	006								75
270-284	012	024	019	002	005								62
285-299	011	026	012	008	001								58
300-314	009	014	011	005	001								40
315-329	014	016	012	003	002								47
330-344	017	024	016	007	002								66
345-359	012	029	016	005	007								69
	361		511		156		35		2		0		2108
		662		290		72		19		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 3M. START DATE 15/05/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
8	17	1	***	.	.	.	.
24	48	2	*****				
40	75	4	*****				
56	110	5	*****				
72	121	6	*****				
88	124	6	*****				
104	143	7	*****				
120	131	6	*****				
136	132	6	*****				
152	128	6	*****				
168	90	4	*****				
184	126	6	*****				
200	118	6	*****				
216	97	5	*****				
232	79	4	*****				
248	83	4	*****				
264	62	3	*****				
280	51	2	*****				
296	50	2	*****				
312	41	2	*****				
328	46	2	*****				
344	39	2	*****				
360	24	1	*****				
376	22	1	*****				
392	23	1	*****				
408	19	1	*****				
424	15	1	***				
440	13	1	***				
456	14	1	***				
472	11	1	**				
488	15	1	***				
504	6	0	*				
520	6	0	*				
536	6	0	*				
552	2	0					
568	2	0					
584	4	0	*				
600	7	0	*				
616	5	0	*				
632	1	0					

NO. OF SAMPLES OVER 640 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2108  
 SAMPLE INTERVAL = 15 MINUTES

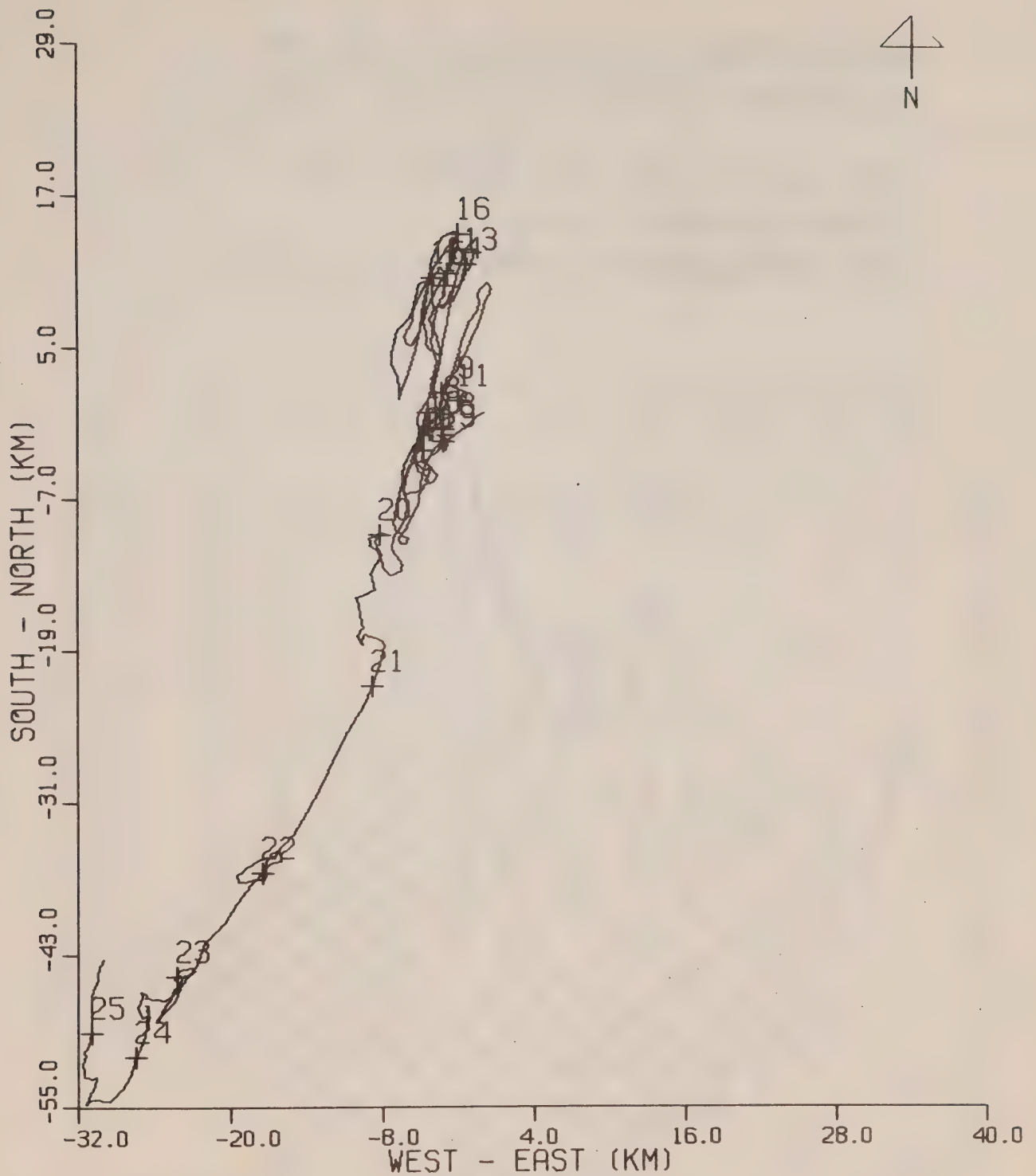


## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 3M. START DATE 15/05/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	40	80	120	160	200
5	88	4	*****				
15	92	4	*****				
25	103	5	*****				
35	95	5	*****				
45	49	2	*****				
55	45	2	*****				
65	35	2	*****				
75	22	1	*****				
85	29	1	*****				
95	18	1	*****				
105	18	1	*****				
115	27	1	*****				
125	25	1	*****				
135	27	1	*****				
145	32	2	*****				
155	39	2	*****				
165	59	3	*****				
175	69	3	*****				
185	65	3	*****				
195	112	5	*****				
205	130	6	*****				
215	169	8	*****				
225	134	6	*****				
235	102	5	*****				
245	83	4	*****				
255	50	2	*****				
265	51	2	*****				
275	36	2	*****				
285	50	2	*****				
295	35	2	*****				
305	26	1	*****				
315	31	1	*****				
325	30	1	*****				
335	42	2	*****				
345	42	2	*****				
355	48	2	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2108  
 SAMPLE INTERVAL = 15 MINUTES



STN. NO. HS-5S

DEPTH 3 M.

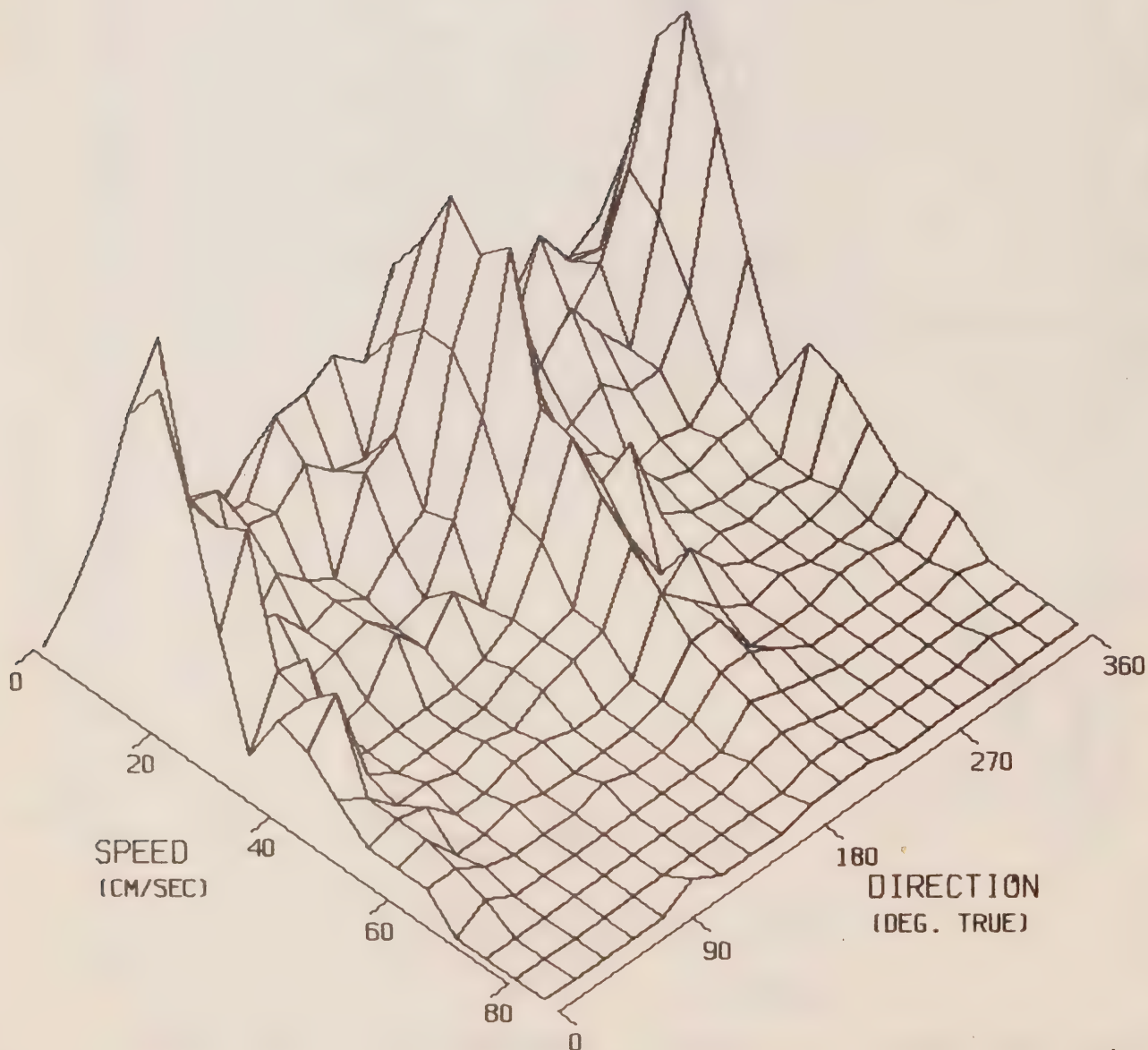
STARTING DATE: 7/ 6/73      ENDING DATE: 25/ 6/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 7/ 6/73

NO. OF SAMPLES = 1728



STN. NO. HS-58 DEPTH 3 M.

STARTING DATE: 7/ 6/73  
SAMPLE INTERVAL = 15 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC),

DIR	SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	009	037	041	036	013	016	007	004	002				165
15- 29	009	037	022	026	013	013	006	005	003				134
30- 44	005	027	020	017	010	002	003	001	001				86
45- 59	010	021	011	004	002		001						49
60- 74	007	018	008	007									40
75- 89	005	013	010	004	001			001					34
90-104	003	009	006	009	005						001		33
105-119	008	017	010	002	002		002	001			001		43
120-134	007	015	005	003	001		002						33
135-149	011	016	016	004	006	002	001						56
150-164	005	021	010	007	005	002	003						53
165-179	007	013	029	021	004	003						001	78
180-194	010	027	027	025	015	014	005	001	001	001	002		128
195-209	009	028	047	044	025	018	012	005	005	002	001		196
210-224	011	023	034	023	012	012	007	008	005	002	001		138
225-239	015	020	010	013	013	006	005	004	001				87
240-254	009	018	014	008	009	002	005						65
255-269	009	014	010	004	004	001	001						43
270-284	006	007	009	008	002	001		001					34
285-299	007	011	016	002	002			001					39
300-314	005	013	008	003									29
315-329	005	012	008	003	002	001		001			001		33
330-344	007	014	020	006	002				001				50
345-359	004	022	032	014	002	001	002	002	001				80
	183		423		150		62		20		7		1726
		453		293		94		35		5		1	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 2



## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 3M. START DATE 07/06/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT.	40	80	120	160	200
11	16	1	*****				
33	35	2	*****				
55	66	4	*****				
77	107	6	*****				
99	118	7	*****				
121	126	7	*****				
143	132	8	*****				
165	130	8	*****				
187	117	7	*****				
209	118	7	*****				
231	107	6	*****				
253	89	5	*****				
275	80	5	*****				
297	72	4	*****				
319	52	3	*****				
341	40	2	*****				
363	47	3	*****				
385	46	3	*****				
407	24	1	*****				
429	35	2	*****				
451	20	1	*****				
473	24	1	*****				
495	18	1	*****				
517	16	1	****				
539	17	1	****				
561	11	1	***				
583	8	0	**				
605	7	0	**				
627	13	1	***				
649	8	0	**				
671	6	0	**				
693	4	0	*				
715	5	0	*				
737	2	0	*				
759	1	0					
781	1	0					
803	2	0	*				
825	2	0	*				
847	3	0	*				
869	0	0					

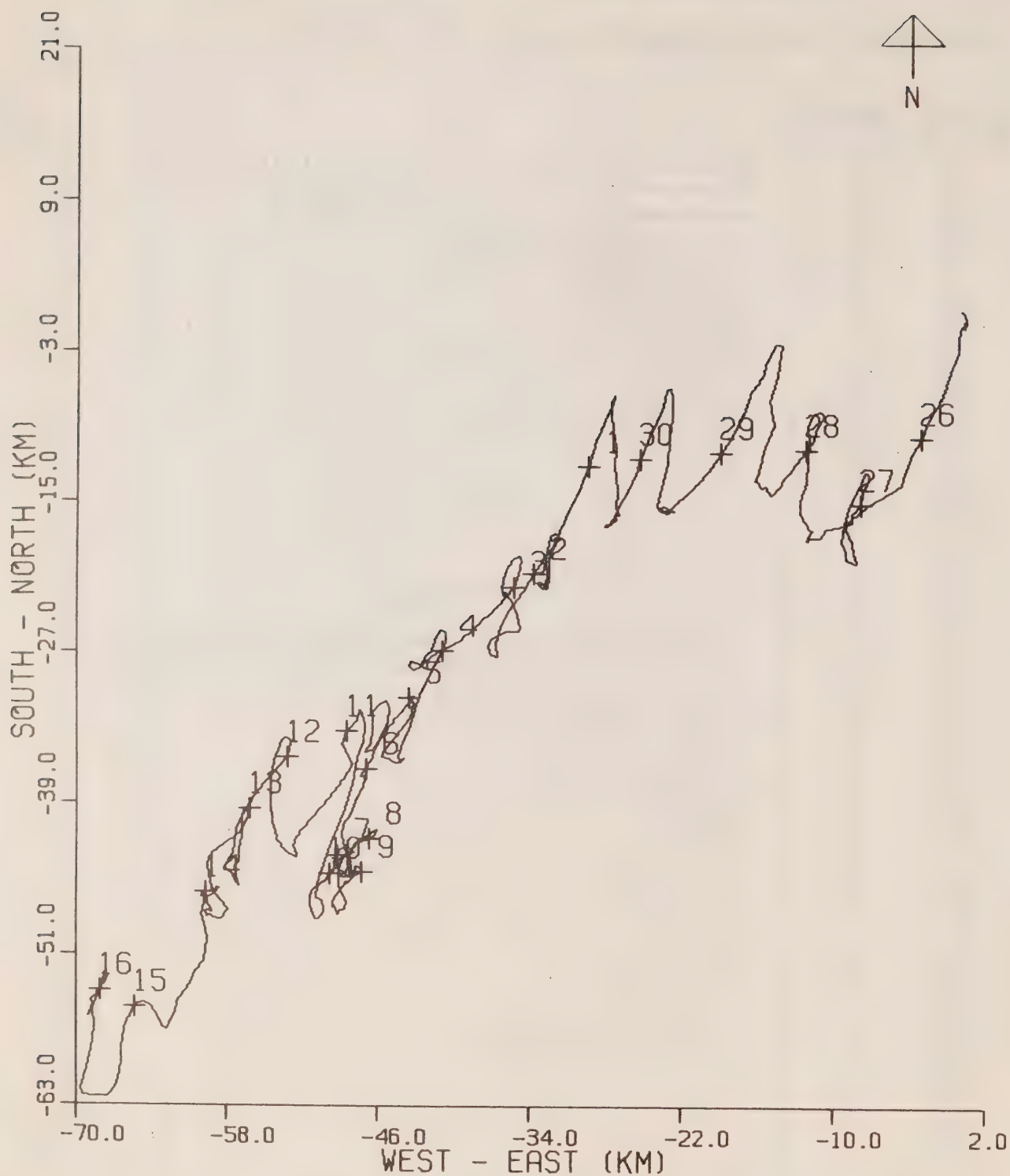
NO. OF SAMPLES OVER 880 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1728  
 SAMPLE INTERVAL = 15 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 3M. START DATE 07/06/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	30	60	90	120	150
5	123	7	*****				
15	90	5	*****				
25	97	6	*****				
35	59	3	*****				
45	34	2	*****				
55	35	2	*****				
65	26	2	*****				
75	21	1	*****				
85	23	1	*****				
95	25	1	*****				
105	27	2	*****				
115	26	2	*****				
125	25	1	*****				
135	31	2	*****				
145	38	2	*****				
155	29	2	*****				
165	46	3	*****				
175	66	4	*****				
185	78	5	*****				
195	120	7	*****				
205	127	7	*****				
215	82	5	*****				
225	80	5	*****				
235	49	3	*****				
245	41	2	*****				
255	49	3	*****				
265	20	1	*****				
275	16	1	*****				
285	31	2	*****				
295	25	1	*****				
305	21	1	*****				
315	20	1	*****				
325	25	1	*****				
335	26	2	*****				
345	45	3	*****				
355	52	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1728  
 SAMPLE INTERVAL = 15 MINUTES



STN. NO. HS-5S

DEPTH 3 M.

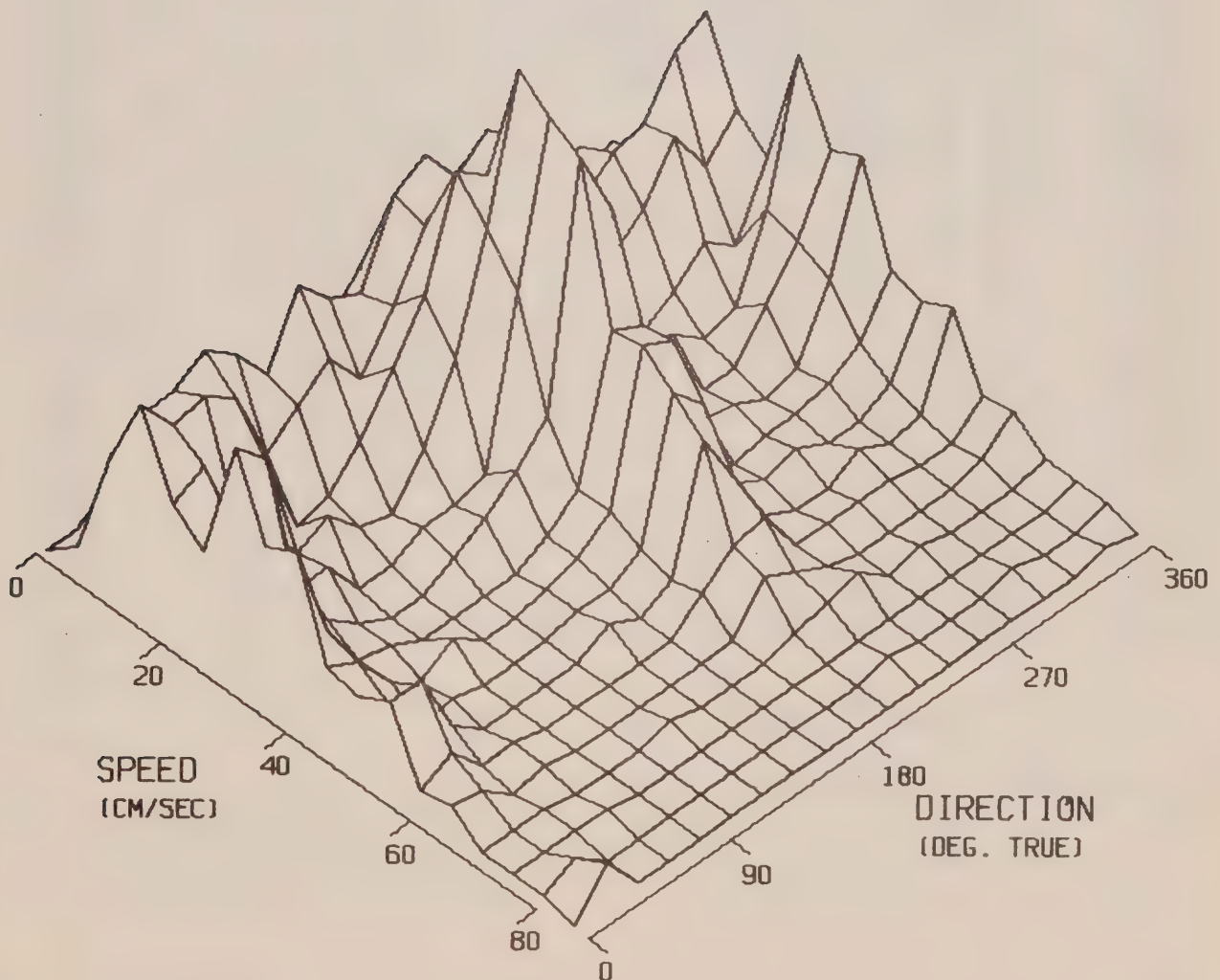
STARTING DATE: 25/ 6/73      ENDING DATE: 16/ 7/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 25/ 6/73

NO. OF SAMPLES = 2000





STN. NO. HS-55 DEPTH 3 M.

STARTING DATE: 25/ 6/73  
SAMPLE INTERVAL = 15 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	006	026	016	029	022	019	015	005	004	002	001		145
15- 29	005	024	020	024	010	007	011	004	002	002	005		114
30- 44	010	026	014	013	007	005	002	002	001	001			81
45- 59	007	024	013	008	003	002	001						58
60- 74	006	026	012	005	002	001		001	001	001			55
75- 89	006	015	006	004		002							33
90-104	006	019	008	002									35
105-119	006	023	009	004					001				43
120-134	005	017	007		004								33
135-149	008	015	017	006	002	001	001	002					52
150-164	013	018	024	010	006		001						72
165-179	010	027	024	022	008	003	001	003					98
180-194	008	031	047	028	022	008	004	003	002				153
195-209	011	026	038	056	041	030	030	006	003				241
210-224	009	028	041	035	032	031	017	009	004		001		207
225-239	006	021	022	027	020	007	008	002	003				116
240-254	008	016	005	009	003	003	001	001	002				48
255-269	010	016	011	005	010	002	001	001					56
270-284	006	023	007	007	001		002	001	001				48
285-299	005	011	013	002	002	001							34
300-314	007	020	015	004	003	002	001	002		001			55
315-329	005	017	018	006	004	002							52
330-344	006	013	013	012	012	002	001				001		60
345-359	003	022	022	015	022	012	011	001	002	001			111
	172		422		236		108		26		8		2000
		504		333		140		43		8		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-58 DEPTH 3M, START DATE 25/06/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT .	40	80	120	160	200
11	13	1	***				
33	30	2	*****				
55	75	4	*****				
77	103	5	*****				
99	129	6	*****				
121	137	7	*****				
143	154	8	*****				
165	137	7	*****				
187	125	6	*****				
209	108	5	*****				
231	96	5	*****				
253	89	4	*****				
275	87	4	*****				
297	97	5	*****				
319	86	4	*****				
341	77	4	*****				
363	70	4	*****				
385	48	2	*****				
407	48	2	*****				
429	42	2	*****				
451	42	2	*****				
473	23	1	*****				
495	32	2	*****				
517	22	1	*****				
539	37	2	*****				
561	15	1	****				
583	14	1	****				
605	10	1	***				
627	12	1	***				
649	13	1	***				
671	4	0	*				
693	4	0	*				
715	5	0	*				
737	1	0					
759	2	0	*				
781	3	0	*				
803	4	0	*				
825	2	0	*				
847	1	0					
869	3	0	*				

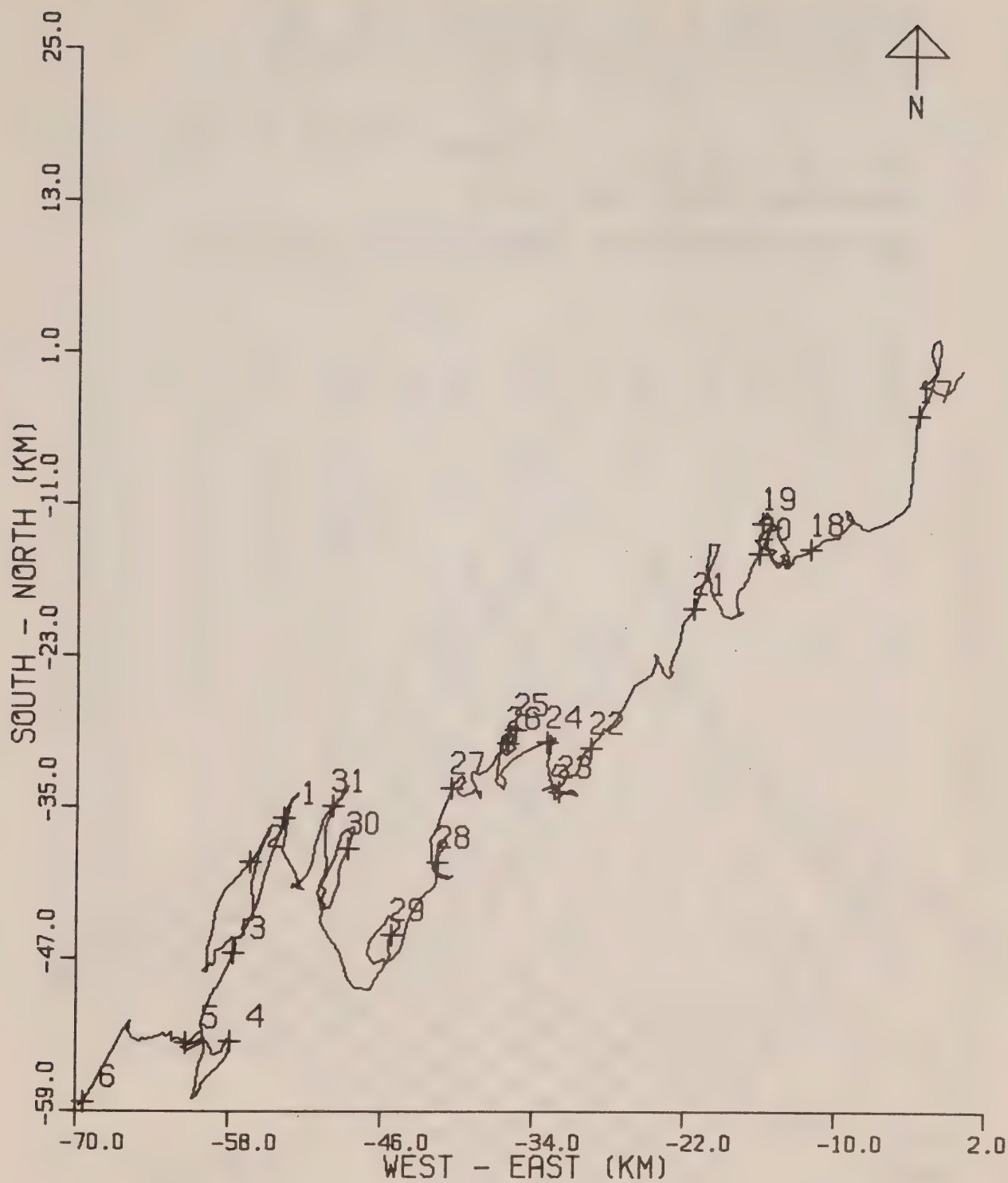
NO. OF SAMPLES OVER 880 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2000  
 SAMPLE INTERVAL = 15 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 3M. START DATE 25/06/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	106	5	*****				
15	99	5	*****				
25	64	3	*****				
35	58	3	*****				
45	36	2	*****				
55	39	2	*****				
65	38	2	*****				
75	30	2	*****				
85	22	1	*****				
95	25	1	*****				
105	14	1	****				
115	35	2	*****				
125	21	1	*****				
135	28	1	*****				
145	42	2	*****				
155	43	2	*****				
165	49	2	*****				
175	77	4	*****				
185	95	5	*****				
195	136	7	*****				
205	170	9	*****				
215	144	7	*****				
225	109	5	*****				
235	61	3	*****				
245	31	2	*****				
255	41	2	*****				
265	32	2	*****				
275	31	2	*****				
285	23	1	*****				
295	26	1	*****				
305	36	2	*****				
315	43	2	*****				
325	27	1	*****				
335	40	2	*****				
345	54	3	*****				
355	75	4	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2000  
 SAMPLE INTERVAL = 15 MINUTES



STN. NO. HS-5S

DEPTH 3 M.

STARTING DATE: 16/ 7/73      ENDING DATE: 6/ 8/73

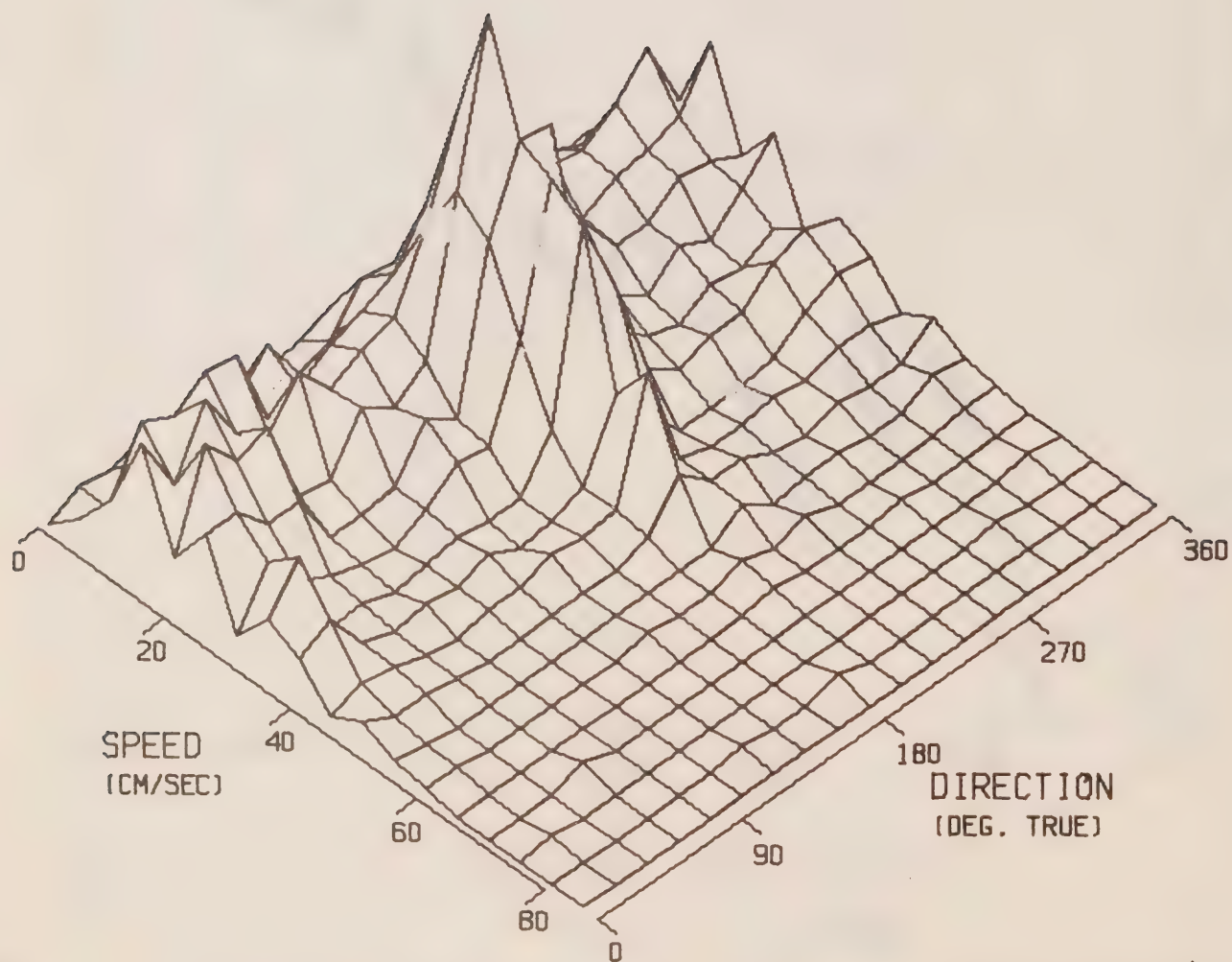


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 16/ 7/73

NO. OF SAMPLES = 2000



STN. NO. HS-55 DEPTH 3 M.

STARTING DATE: 16/ 7/73  
SAMPLE INTERVAL = 15 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	004	021	028	014	020	008	002	001					98
15- 29	004	022	027	014	018	008	001	001		001			96
30- 44	007	019	026	010	004	004	002						72
45- 59	010	031	025	008		001	001						76
60- 74	007	026	014	008	003	002			002				62
75- 89	008	020	005	003	001								37
90-104	005	012	012	002	002	001							34
105-119	008	010	009		004						001		32
120-134	010	016	014	005	001	003							49
135-149	002	016	014	012	001	001		001					47
150-164	006	012	014	006		003							41
165-179	009	023	031	018	003	002	001				002		89
180-194	013	029	062	040	022	011	002						179
195-209	009	042	074	062	041	020	006	002	001				257
210-224	007	034	055	046	023	009	005	001					180
225-239	007	037	025	016	015	003	003						106
240-254	008	025	024	004	003	003	003	002					72
255-269	010	018	022	012	005		002						69
270-284	008	019	011	005	005	004	001	001					54
285-299	008	012	014	007	005	001	001			001		001	50
300-314	010	026	005	010	006	004	001						62
315-329	007	019	021	008	011	005	001						72
330-344	005	024	021	011	014	003	001	002	001				82
345-359	007	018	023	012	007	008	005	001					81
	179		576		214		38		4		3		1997
		531		333		104		12		2		1	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 3

## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 3M, START DATE 16/07/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	40	80	120	160	200
11	19	1	*****				
33	37	2	*****				
55	61	3	*****				
77	116	6	*****				
99	156	8	*****				
121	138	7	*****				
143	150	8	*****				
165	174	9	*****				
187	153	8	*****				
209	166	8	*****				
231	131	7	*****				
253	104	5	*****				
275	90	5	*****				
297	88	4	*****				
319	70	4	*****				
341	79	4	*****				
363	57	3	*****				
385	37	2	*****				
407	28	1	*****				
429	35	2	*****				
451	23	1	*****				
473	29	1	*****				
495	15	1	****				
517	13	1	***				
539	5	0	*				
561	4	0	*				
583	6	0	**				
605	2	0	*				
627	1	0					
649	1	0					
671	0	0					
693	1	0					
715	2	0	*				
737	1	0					
759	0	0					
781	1	0					
803	2	0	*				
825	1	0					
847	0	0					
869	0	0					

NO. OF SAMPLES OVER 880 = 4  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2000  
 SAMPLE INTERVAL = 15 MINUTES

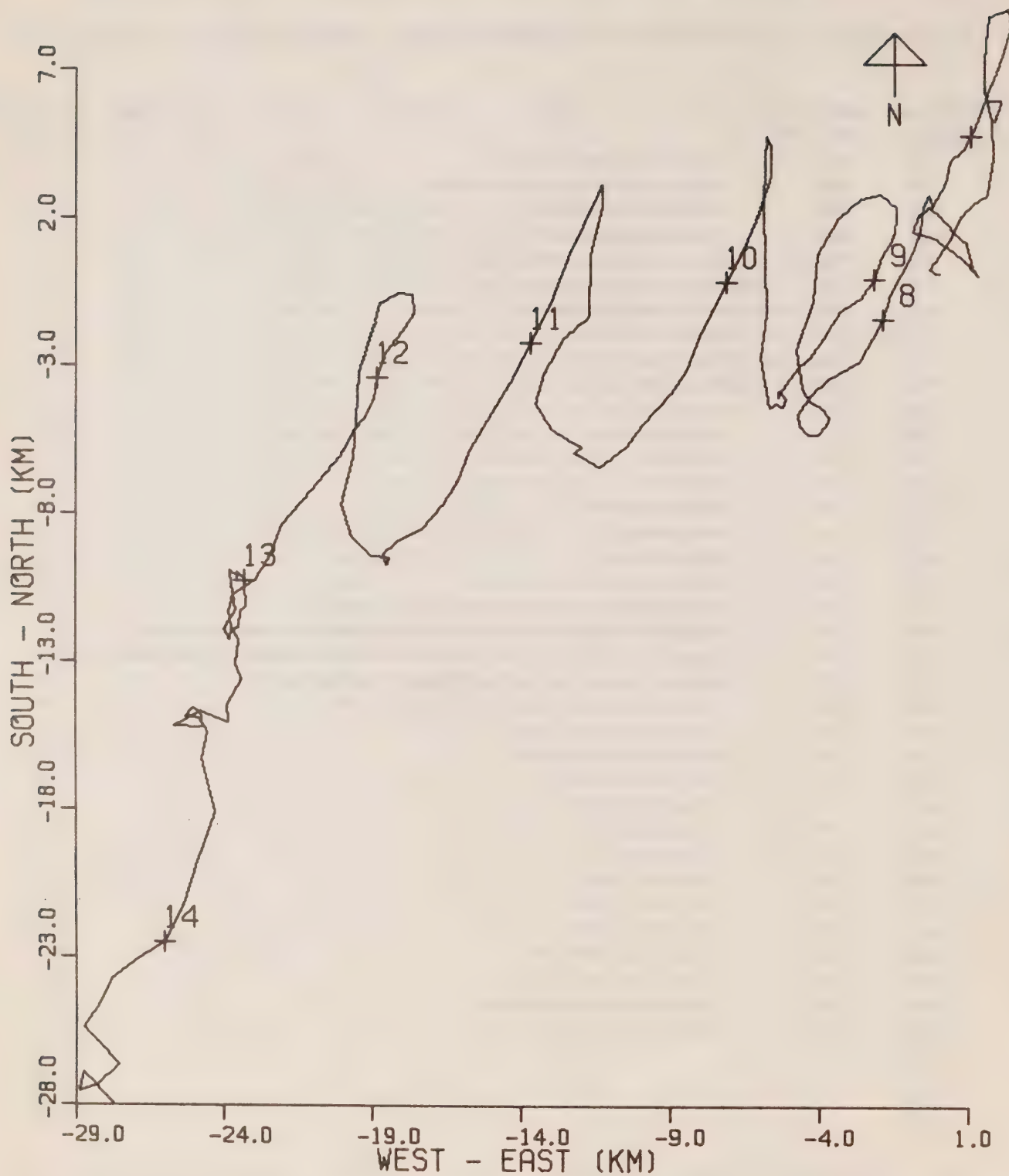
## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 3M. START DATE 16/07/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	62	3	*****	.	.	.	.
15	83	4	*****				
25	55	3	*****				
35	45	2	*****				
45	55	3	*****				
55	46	2	*****				
65	48	2	*****				
75	24	1	*****				
85	26	1	*****				
95	24	1	*****				
105	19	1	*****				
115	23	1	*****				
125	35	2	*****				
135	24	1	*****				
145	38	2	*****				
155	31	2	*****				
165	36	2	*****				
175	70	4	*****				
185	104	5	*****				
195	158	8	*****				
205	174	9	*****				
215	117	6	*****				
225	105	5	*****				
235	61	3	*****				
245	56	3	*****				
255	43	2	*****				
265	38	2	*****				
275	39	2	*****				
285	30	2	*****				
295	39	2	*****				
305	43	2	*****				
315	39	2	*****				
325	52	3	*****				
335	48	2	*****				
345	68	3	*****				
355	42	2	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2000  
 SAMPLE INTERVAL = 15 MINUTES





STN. NO. HS-5S

DEPTH 3 M.

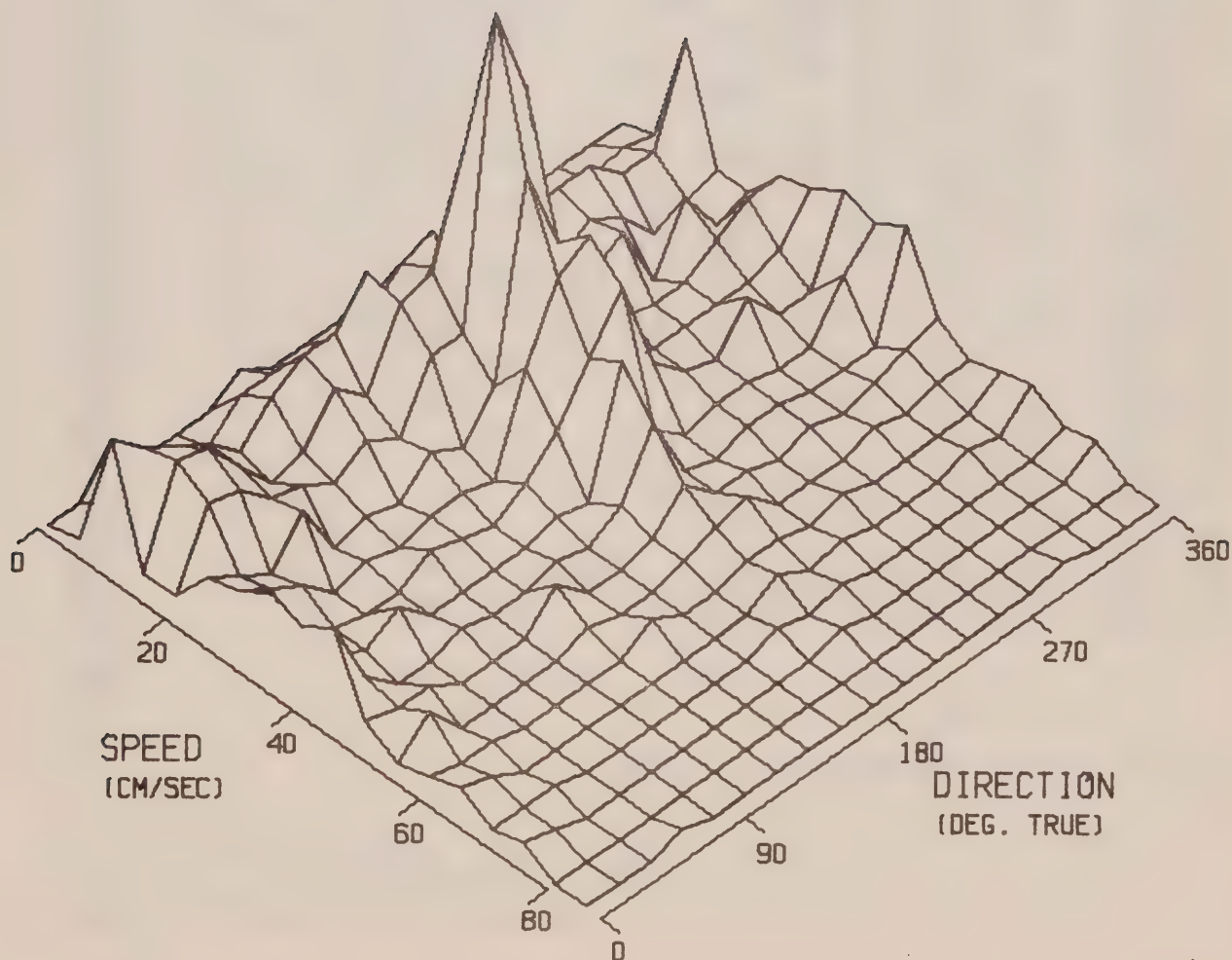
STARTING DATE: 6/ 8/73      ENDING DATE: 14/ 8/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    3 M.

STARTING DATE: 6/ 8/73

NO. OF SAMPLES = 808



STN. NO. HS-55 DEPTH 3 M.

STARTING DATE: 6/ 8/73  
SAMPLE INTERVAL = 15 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	002	013	008	009	007	009	005	003		002			58
15- 29		017	008	004	001	006	002	002	002	001			43
30- 44	005	010	005	004	002	002	003	001	001				33
45- 59	002	007	007	003		001							20
60- 74	002	008	009	002	002						001		24
75- 89		004	004	001		001							10
90-104	003	002	004		002								11
105-119	004	007	004	001									16
120-134	004	011	004	002	001		003	001					26
135-149	003	009	002	002		001							17
150-164	002	011	010		002	001		002					28
165-179	002	014	009	003	003	001							32
180-194		007	013	011	005	002	003	002	001				44
195-209	006	018	048	025	014	012	004	001	001	001			130
210-224	007	011	041	024	019	002	003		001				108
225-239		011	009	011	007		002	001					41
240-254	001	004	008	004	003				001				21
255-269	001	006	005	001	002	002		001					18
270-284	003	009	006	001		001	001						21
285-299	001	012	003	003	001	001	001				001		23
300-314		005	001	002	005								13
315-329	001	003	007	002	001		001		001				16
330-344	002	003	001	008	001	001	003						19
345-359	002	005	003	004	007	010		001	002				34
	53		219		85		31		10		2		806
		207		127		53		15		4		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 2

## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 3M. START DATE 06/08/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	20	40	60	80	100
13	7	1	****				
39	26	3	*****				
65	20	2	*****				
91	69	9	*****				
117	69	9	*****				
143	60	7	*****				
169	76	9	*****				
195	69	9	*****				
221	71	9	*****				
247	46	6	*****				
273	44	5	*****				
299	37	5	*****				
325	39	5	*****				
351	32	4	*****				
377	21	3	*****				
403	23	3	*****				
429	14	2	*****				
455	16	2	*****				
481	10	1	*****				
507	14	2	*****				
533	9	1	*****				
559	5	1	***				
585	2	0	*				
611	7	1	****				
637	6	1	***				
663	4	0	**				
689	1	0	*				
715	3	0	**				
741	2	0	*				
767	2	0	*				
793	0	0					
819	0	0					
845	1	0	*				
871	1	0	*				
897	0	0					
923	0	0					
949	0	0					
975	0	0					
1001	0	0					
1027	0	0					

NO. OF SAMPLES OVER 1040 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 808  
 SAMPLE INTERVAL = 15 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 3M. START DATE 06/08/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	20	40	60	80	100
5	45	6	*****				
15	32	4	*****				
25	27	3	*****				
35	24	3	*****				
45	19	2	*****				
55	10	1	*****				
65	19	2	*****				
75	8	1	****				
85	4	0	**				
95	8	1	****				
105	10	1	*****				
115	10	1	*****				
125	21	3	*****				
135	11	1	*****				
145	14	2	*****				
155	18	2	*****				
165	20	2	*****				
175	22	3	*****				
185	27	3	*****				
195	56	7	*****				
205	98	12	*****				
215	79	10	*****				
225	34	4	*****				
235	29	4	*****				
245	14	2	*****				
255	18	2	*****				
265	7	1	****				
275	16	2	*****				
285	14	2	*****				
295	12	1	*****				
305	11	1	*****				
315	8	1	****				
325	12	1	*****				
335	13	2	*****				
345	13	2	*****				
355	25	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 808  
 SAMPLE INTERVAL = 15 MINUTES

## HISTOGRAM OF SPEED

HOWE SOUND HS-59 DEPTH 3M. START DATE 06/08/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	20	40	60	80	100
11	7	1	*****				
33	9	1	*****				
55	23	3	*****				
77	44	6	*****				
99	53	7	*****				
121	58	7	*****				
143	53	7	*****				
165	57	7	*****				
187	65	8	*****				
209	65	8	*****				
231	45	6	*****				
253	37	5	*****				
275	37	5	*****				
297	29	4	*****				
319	38	5	*****				
341	23	3	*****				
363	29	4	*****				
385	12	2	*****				
407	22	3	*****				
429	11	1	*****				
451	12	2	*****				
473	11	1	*****				
495	11	1	*****				
517	7	1	****				
539	9	1	*****				
561	2	0	*				
583	1	0	*				
605	6	1	***				
627	6	1	***				
649	4	1	**				
671	2	0	*				
693	2	0	*				
715	2	0	*				
737	2	0	*				
759	2	0	*				
781	0	0					
803	0	0					
825	0	0					
847	1	0	*				
869	1	0	*				

NO. OF SAMPLES OVER 880 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 800  
 SAMPLE INTERVAL = 15 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 3M, START DATE 06/08/73

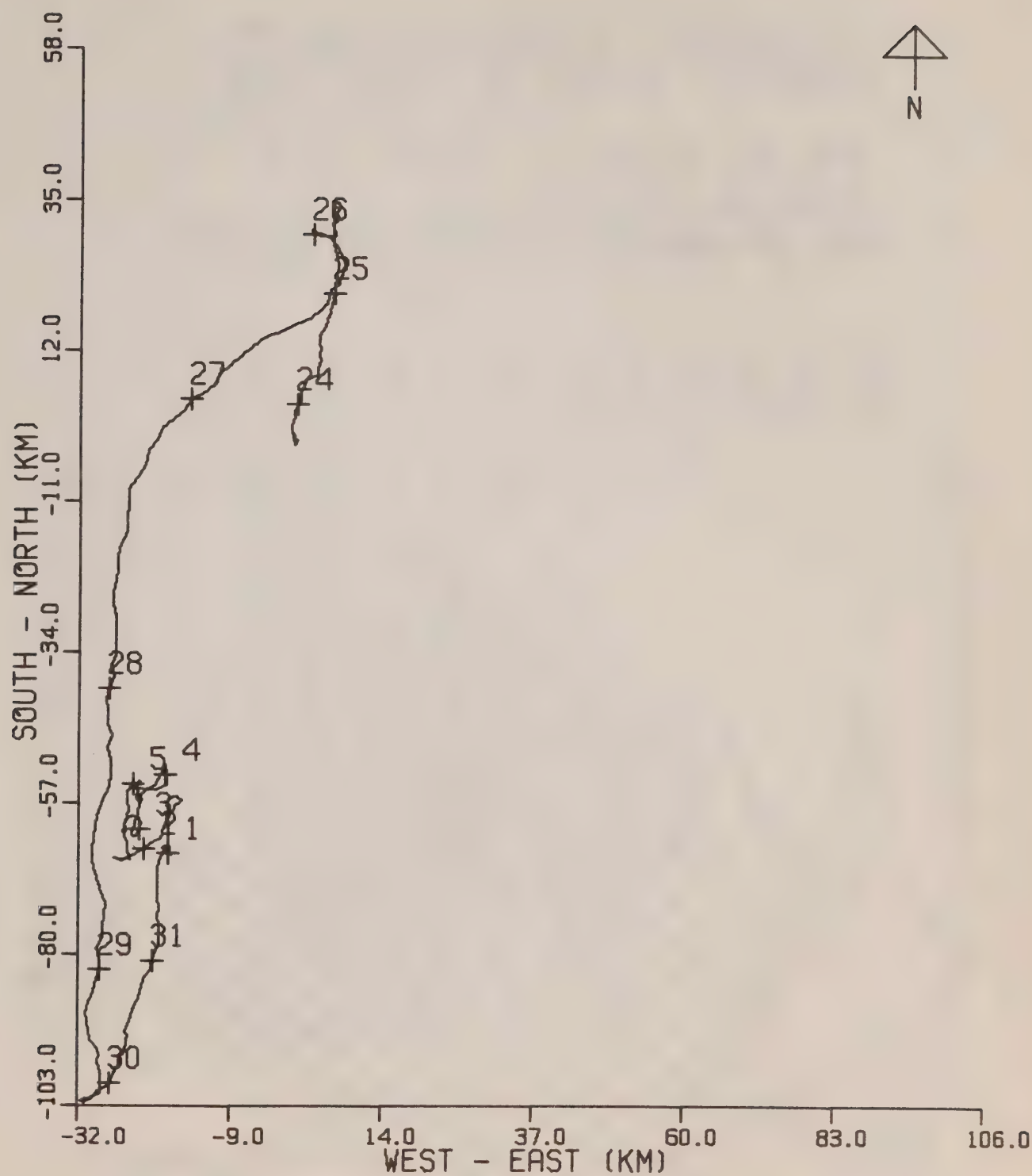
MEDIAN (DEG.T)	FREQUENCY NO.	PCT	20	40	60	80	100
5	45	6	*****				
15	32	4	*****				
25	27	3	*****				
35	24	3	*****				
45	19	2	*****				
55	10	1	*****				
65	18	2	*****				
75	8	1	****				
85	4	1	**				
95	8	1	****				
105	10	1	*****				
115	10	1	*****				
125	18	2	*****				
135	11	1	*****				
145	14	2	*****				
155	18	2	*****				
165	20	3	*****				
175	22	3	*****				
185	26	3	*****				
195	56	7	*****				
205	98	12	*****				
215	78	10	*****				
225	34	4	*****				
235	29	4	*****				
245	14	2	*****				
255	18	2	*****				
265	7	1	****				
275	16	2	*****				
285	14	2	*****				
295	12	2	*****				
305	11	1	*****				
315	8	1	****				
325	11	1	*****				
335	13	2	*****				
345	13	2	*****				
355	24	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 800  
 SAMPLE INTERVAL = 15 MINUTES

DATA FOR 5-METRE DEPTH







STN. NO. HS-5N

DEPTH 5 M.

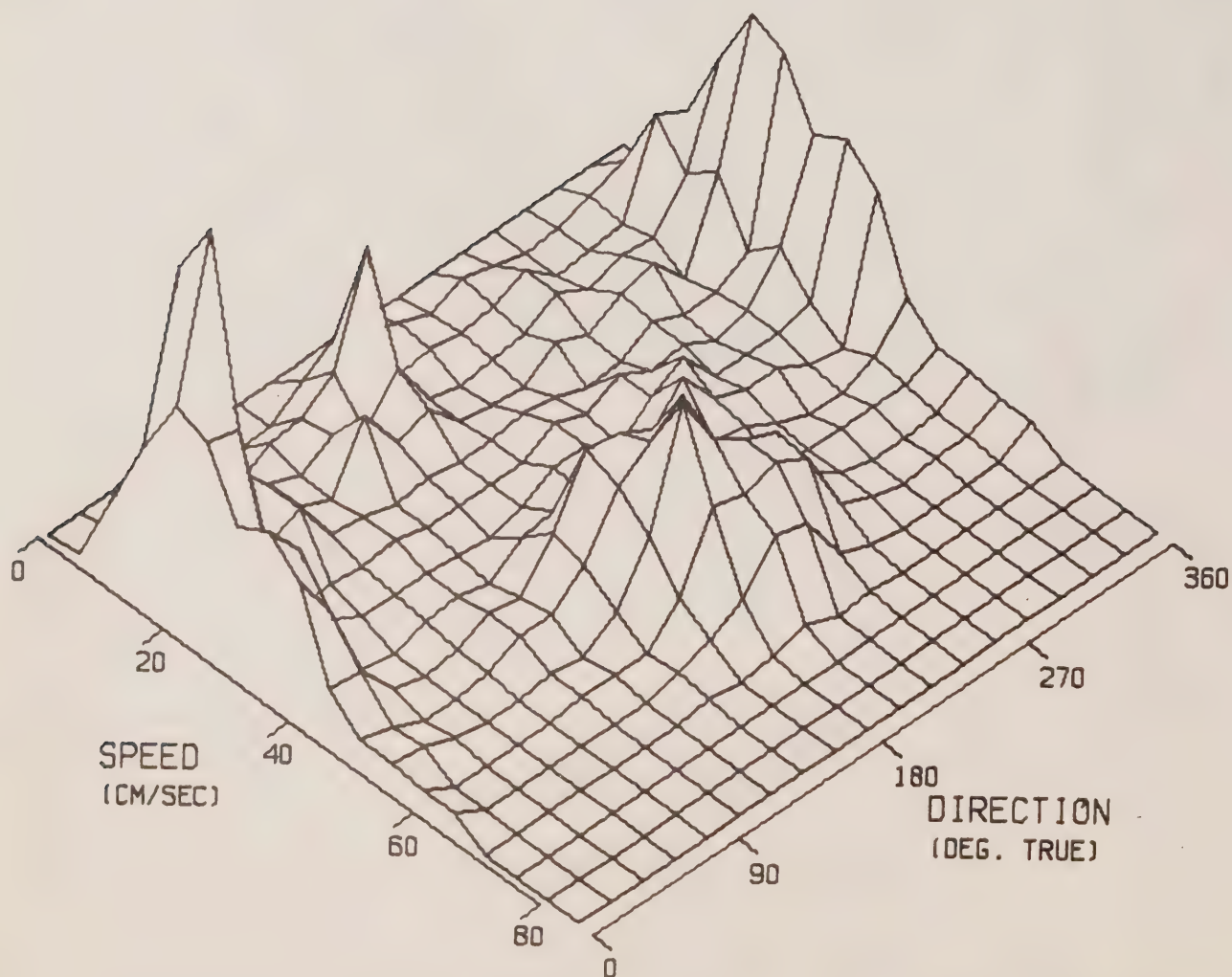
STARTING DATE: 23/ 1/73      ENDING DATE: 5/ 2/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 23/ 1/73

NO. OF SAMPLES = 1822



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE 123/ 1/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

DIR	000 TO 079	080 TO 159	160 TO 239	240 TO 319	320 TO 399	400 TO 479	480 TO 559	560 TO 639	640 TO 719	720 TO 799	800 TO 879	880 TO 959	
0- 14		033	069	045	041	008	007	006	001				210
15- 29	001	047	088	034	021	020	006						217
30- 44		026	031	010	008	002							77
45- 59		019	024	012			001						56
60- 74		006	016	007	005								34
75- 89		006	009	007	002	003	001						28
90-104		008	003	008	001	005	003						28
105-119		008	016	003	005	004	003	001					40
120-134	002	010	008	001	002	001	005	001					30
135-149	006	008	007	005	003	013	010	003	003				58
150-164	010	026	010	003	002	023	022	004	002				102
165-179	006	022	004	005	009	029	031	032	004				142
180-194	003	001	002	003	004	018	045	025	007			001	109
195-209	004	003	001	006	010	023	030	026	012				115
210-224		002	003	004	001	018	021	029	007				85
225-239		002		003	010	011	013	033	004				76
240-254	007	005	008	006	009	014	013	015	001				78
255-269	001	005	002	005	010	009	002	007					41
270-284			001	004	004	008		003					20
285-299		005	013	007	004	002	002	001					34
300-314	002	001	003	001	003	001	001						12
315-329	003	004		003	003	002	001	001					17
330-344	002	018	017	010	006	002							55
345-359	006	024	042	033	028	017	005	002					157
	53		377		191		222		41		0		1821
	289		225		233		189		0			1	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 1



## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 23/01/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	30	60	90	120	150
9	0	0	.	.	.	.	.
27	0	0					
45	3	0	*				
63	40	2	*****				
81	45	2	*****				
99	47	3	*****				
117	77	4	*****				
135	58	3	*****				
153	72	4	*****				
171	104	6	*****				
189	89	5	*****				
207	97	5	*****				
225	74	4	*****				
243	48	3	*****				
261	60	3	*****				
279	49	3	*****				
297	46	3	*****				
315	45	2	*****				
333	53	3	*****				
351	37	2	*****				
369	50	3	*****				
387	41	2	*****				
405	47	3	*****				
423	44	2	*****				
441	68	4	*****				
459	41	2	*****				
477	48	3	*****				
495	42	2	*****				
513	60	3	*****				
531	55	3	*****				
549	50	3	*****				
567	59	3	*****				
585	53	3	*****				
603	33	2	*****				
621	35	2	*****				
639	22	1	*****				
657	14	1	*****				
675	12	1	****				
693	2	0	*				
711	0	0					

NO. OF SAMPLES OVER 720 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1822  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 23/01/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	144	8	*****				
15	163	9	*****				
25	127	7	*****				
35	53	3	*****				
45	41	2	*****				
55	33	2	*****				
65	28	2	*****				
75	19	1	*****				
85	14	1	****				
95	20	1	*****				
105	20	1	*****				
115	29	2	*****				
125	20	1	*****				
135	28	2	*****				
145	45	2	*****				
155	65	4	*****				
165	93	5	*****				
175	87	5	*****				
185	67	4	*****				
195	86	5	*****				
205	72	4	*****				
215	53	3	*****				
225	52	3	*****				
235	53	3	*****				
245	54	3	*****				
255	44	2	*****				
265	18	1	*****				
275	15	1	****				
285	20	1	*****				
295	18	1	*****				
305	10	1	***				
315	7	0	**				
325	14	1	***				
335	32	2	*****				
345	56	3	*****				
355	122	7	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1822  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 23/01/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	50	100	150	200	250
4.84	0	0	.	.	.	.	.
4.92	0	0					
5.00	15	1	***				
5.08	29	2	*****				
5.16	22	1	****				
5.24	23	1	*****				
5.32	24	1	*****				
5.40	18	1	****				
5.48	25	1	*****				
5.56	14	1	***				
5.64	27	1	*****				
5.72	50	3	*****				
5.80	148	8	*****				
5.88	190	10	*****				
5.96	194	11	*****				
6.04	198	11	*****				
6.12	80	4	*****				
6.20	44	2	*****				
6.28	37	2	*****				
6.36	18	1	****				
6.44	6	0	*				
6.52	4	0	*				
6.60	22	1	****				
6.68	32	2	*****				
6.76	38	2	*****				
6.84	12	1	**				
6.92	5	0	*				
7.00	5	0	*				
7.08	15	1	***				
7.16	19	1	****				
7.24	43	2	*****				
7.32	27	1	*****				
7.40	55	3	*****				
7.48	91	5	*****				
7.56	120	7	*****				
7.64	64	4	*****				
7.72	62	3	*****				
7.80	37	2	*****				
7.88	9	0	**				
7.96	0	0					

NO. OF SAMPLES OVER 8.00 = 0

NO. OF SAMPLES UNDER 4.80 = 0

TOTAL NO. OF OBSERVATIONS = 1822

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 23/01/73

MEDIAN (PPT)	FREQUENCY NO. PCT.		60	120	180	240	300
22.20	3 0	*	.	.	.	.	.
22.40	3 0	*					
22.60	4 0	*					
22.80	7 0	*					
23.00	6 0	*					
23.20	10 1	**					
23.40	17 1	***					
23.60	19 1	***					
23.80	11 1	**					
24.00	12 1	**					
24.20	17 1	***					
24.40	12 1	**					
24.60	13 1	**					
24.80	11 1	**					
25.00	4 0	*					
25.20	10 1	**					
25.40	13 1	**					
25.60	22 1	*****					
25.80	39 2	*****					
26.00	71 4	*****					
26.20	103 6	*****					
26.40	115 6	*****					
26.60	155 9	*****					
26.80	179 10	*****					
27.00	123 7	*****					
27.20	91 5	*****					
27.40	43 2	*****					
27.60	26 1	****					
27.80	18 1	***					
28.00	12 1	**					
28.20	18 1	***					
28.40	42 2	*****					
28.60	38 2	*****					
28.80	21 1	****					
29.00	43 2	*****					
29.20	84 5	*****					
29.40	216 12	*****					
29.60	123 7	*****					
29.80	57 3	*****					
30.00	11 1	**					

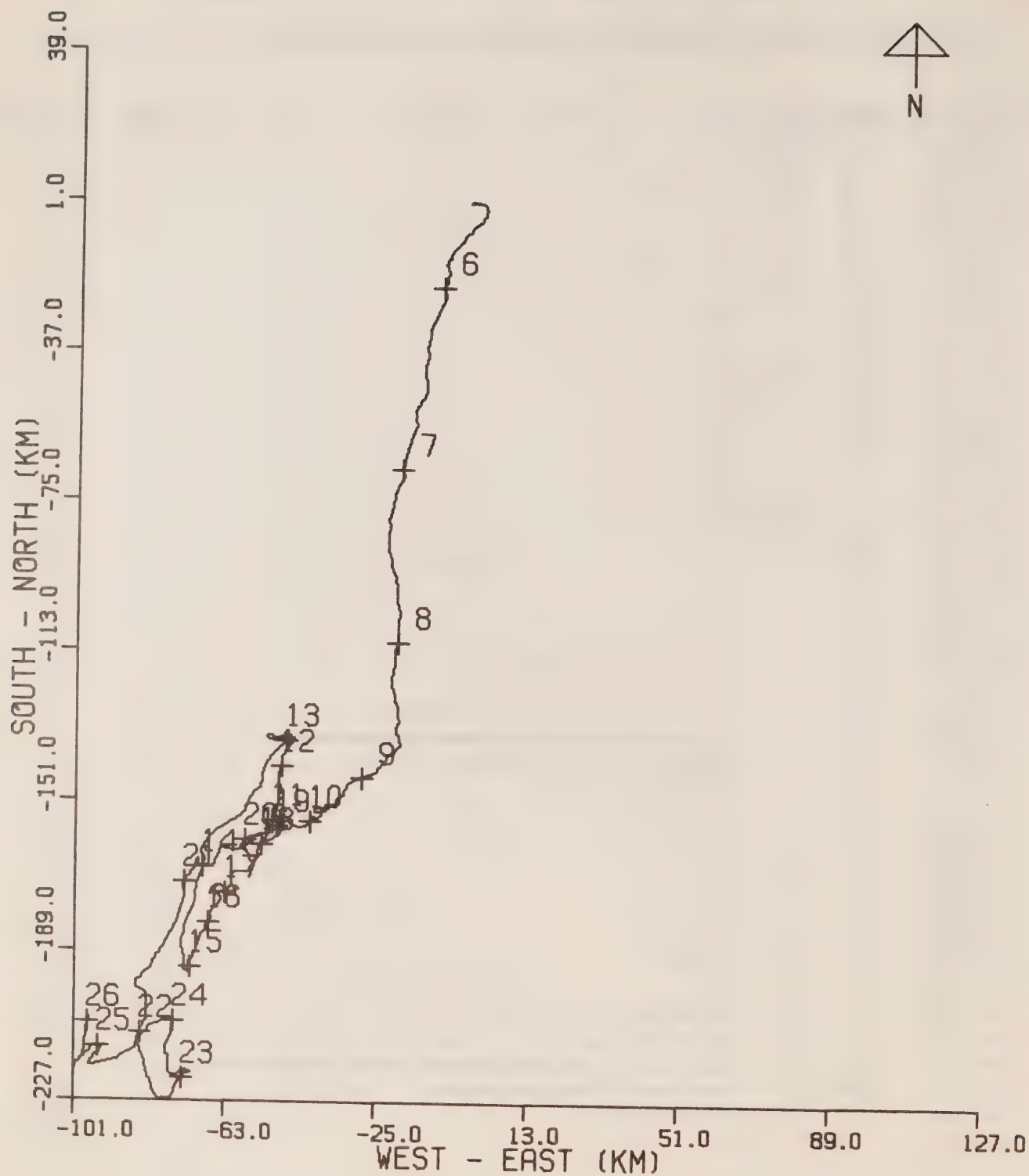
NO. OF SAMPLES OVER 30.10 = 0

NO. OF SAMPLES UNDER 22.10 = 0

TOTAL NO. OF OBSERVATIONS = 1822

SAMPLE INTERVAL = 10 MINUTES





STN. NO. HS-5N

DEPTH 5 M.

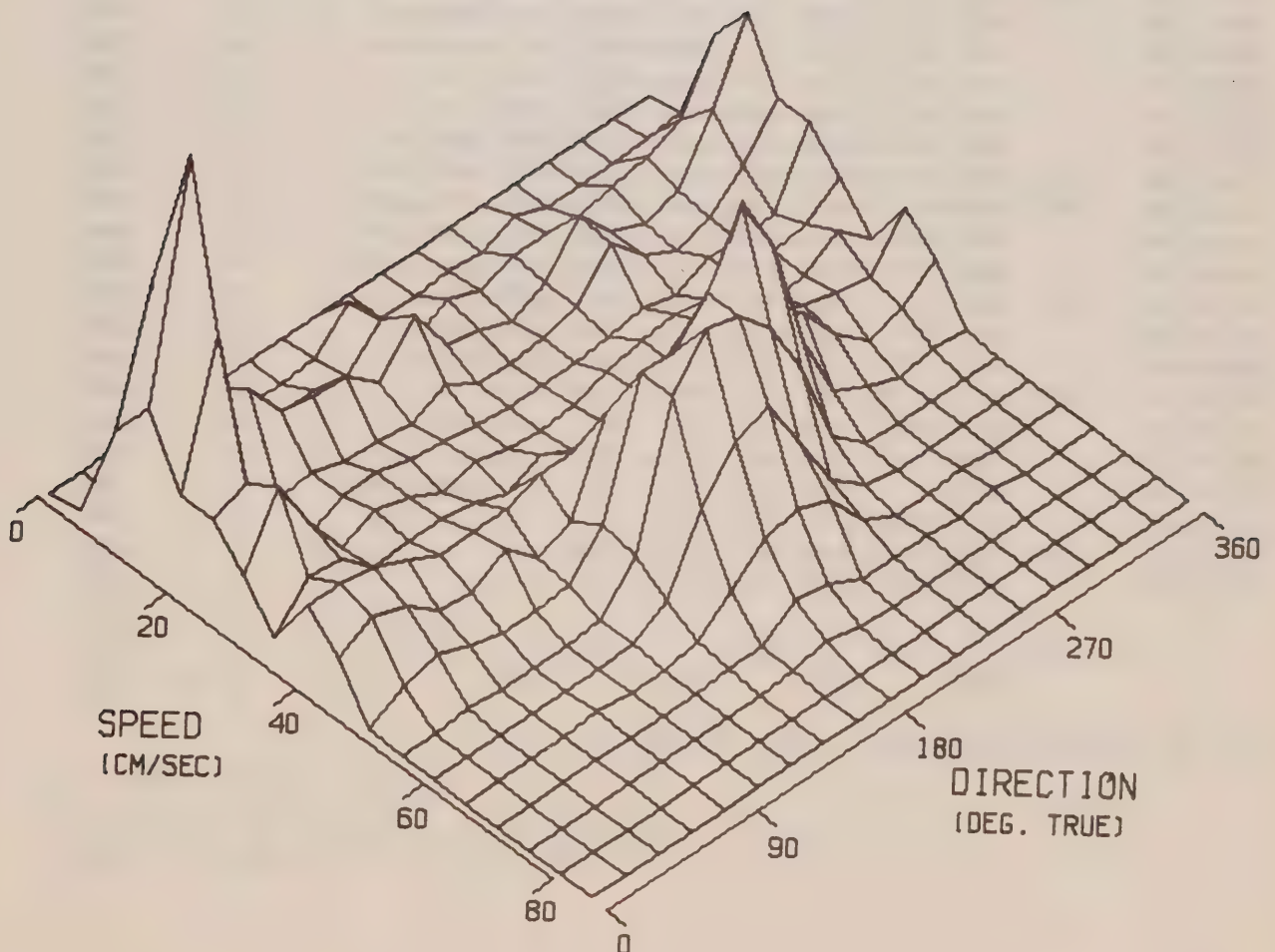
STARTING DATE: 5/ 2/73 ENDING DATE: 26/ 2/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 5/ 2/73

NO. OF SAMPLES = 3000



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 5/ 2/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	002	067	053	033	016	024	001						196
15- 29		104	100	043	021	025	005						298
30- 44	001	048	034	027	027	027	002						166
45- 59		031	009	010	014	015	009						88
60- 74	001	028	010	012	012	016	002						81
75- 89		013	011	008	011	011	001		001				56
90-104		011	009	012	011	015	002						60
105-119		020	010	010	011	014	002						67
120-134		006	005	003	007	010	006	001					38
135-149		006	006	007	006	016	019	011	001				72
150-164	010	024	011	002	013	028	050	031	004	001			174
165-179	003	008	003	005	009	043	064	045	012	003			195
180-194		005	002	003	007	023	083	056	009	003			191
195-209		006	001	003	009	038	084	055	014	003			213
210-224	001	001	002	004	014	050	076	055	004				207
225-239		004	001	006	015	060	078	026	004				194
240-254		014	009	011	013	075	047	010	001				180
255-269	004	013	019	008	024	038	025	004					135
270-284		002	009	003	017	031	007						69
285-299		009	009	010	007	016	004						55
300-314		005		007	012	013	001		002	001			41
315-329		010	008	011	010	010							49
330-344	001	023	014	008	014	010	001						71
345-359		026	024	023	019	011	001						104
	23		359		319		570		52		0		3000
	484			269		619		294		11		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 05/02/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
10	0	0	.	.	.	.	.
30	0	0					
50	9	0	**				
70	14	0	***				
90	46	2	*****				
110	147	5	*****				
130	154	5	*****				
150	137	5	*****				
170	148	5	*****				
190	96	3	*****				
210	71	2	*****				
230	59	2	*****				
250	53	2	*****				
270	55	2	*****				
290	68	2	*****				
310	78	3	*****				
330	72	2	*****				
350	65	2	*****				
370	96	3	*****				
390	114	4	*****				
410	121	4	*****				
430	134	4	*****				
450	176	6	*****				
470	160	5	*****				
490	171	6	*****				
510	169	6	*****				
530	132	4	*****				
550	122	4	*****				
570	102	3	*****				
590	78	3	*****				
610	46	2	*****				
630	44	1	*****				
650	22	1	***				
670	16	1	**				
690	9	0	**				
710	7	0	*				
730	7	0	*				
750	0	0					
770	2	0					
790	0	0					

NO. OF SAMPLES OVER 800 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND H9-5N DEPTH 5M. START DATE 05/02/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	40	80	120	160	200
5	130	4	*****				
15	191	6	*****				
25	193	6	*****				
35	110	4	*****				
45	79	3	*****				
55	53	2	*****				
65	51	2	*****				
75	42	1	*****				
85	42	1	*****				
95	40	1	*****				
105	42	1	*****				
115	39	1	*****				
125	25	1	*****				
135	33	1	*****				
145	59	2	*****				
155	107	4	*****				
165	155	5	*****				
175	120	4	*****				
185	126	4	*****				
195	124	4	*****				
205	142	5	*****				
215	139	5	*****				
225	137	5	*****				
235	129	4	*****				
245	125	4	*****				
255	99	3	*****				
265	85	3	*****				
275	49	2	*****				
285	39	1	*****				
295	34	1	*****				
305	33	1	*****				
315	20	1	*****				
325	38	1	*****				
335	46	2	*****				
345	57	2	*****				
355	67	2	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS=5N DEPTH 5M. START DATE 05/02/73

MEDIAN (DEG.C)	FREQNCY NO.	PCT	90	180	270	360	450
5.62	0	0	.	.	.	.	.
5.66	0	0					
5.70	0	0					
5.74	0	0					
5.78	0	0					
5.82	0	0					
5.86	5	0	*				
5.90	6	0	*				
5.94	5	0	*				
5.98	5	0	*				
6.02	4	0					
6.06	22	1	**				
6.10	33	1	*****				
6.14	45	2	*****				
6.18	37	1	*****				
6.22	45	2	*****				
6.26	37	1	*****				
6.30	99	3	*****				
6.34	189	6	*****				
6.38	405	14	*****				
6.42	345	12	*****				
6.46	175	6	*****				
6.50	321	11	*****				
6.54	197	7	*****				
6.58	133	4	*****				
6.62	73	2	*****				
6.66	175	6	*****				
6.70	88	3	*****				
6.74	87	3	*****				
6.78	47	2	*****				
6.82	59	2	*****				
6.86	14	0	**				
6.90	42	1	*****				
6.94	89	3	*****				
6.98	39	1	****				
7.02	82	3	*****				
7.06	65	2	*****				
7.10	24	1	***				
7.14	6	0	*				
7.18	2	0					

NO. OF SAMPLES OVER 7.20 = 0

NO. OF SAMPLES UNDER 5.60 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 05/02/73

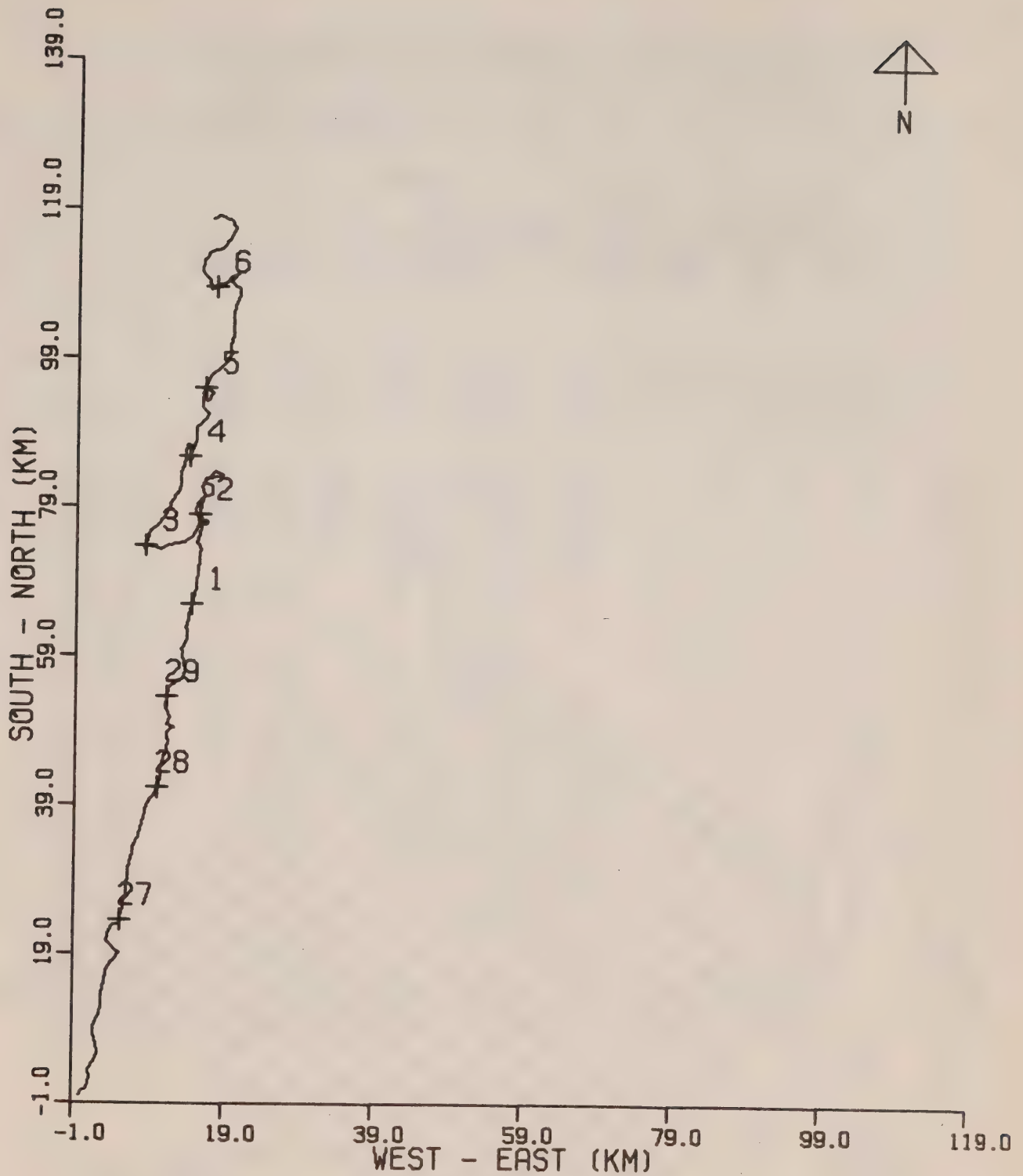
MEDIAN (PPT)	FREQINCY NO. PCT	80	160	240	320	400
26.05	1 0	.	.	.	.	.
26.15	1 0					
26.25	1 0					
26.35	2 0					
26.45	4 0	*				
26.55	3 0					
26.65	4 0	*				
26.75	6 0	*				
26.85	5 0	*				
26.95	20 1	***				
27.05	23 1	***				
27.15	28 1	****				
27.25	40 1	*****				
27.35	75 3	*****				
27.45	94 3	*****				
27.55	121 4	*****				
27.65	160 5	*****				
27.75	197 7	*****				
27.85	178 6	*****				
27.95	245 8	*****				
28.05	247 8	*****				
28.15	297 10	*****				
28.25	242 8	*****				
28.35	168 6	*****				
28.45	169 6	*****				
28.55	100 3	*****				
28.65	71 2	*****				
28.75	61 2	*****				
28.85	56 2	*****				
28.95	55 2	*****				
29.05	26 1	***				
29.15	24 1	***				
29.25	95 3	*****				
29.35	138 5	*****				
29.45	40 1	*****				
29.55	3 0					
29.65	0 0					
29.75	0 0					
29.85	0 0					
29.95	0 0					

NO. OF SAMPLES OVER 30.00 = 0

NO. OF SAMPLES UNDER 26.00 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 5 M.

STARTING DATE: 26/ 2/73      ENDING DATE: 6/ 3/73

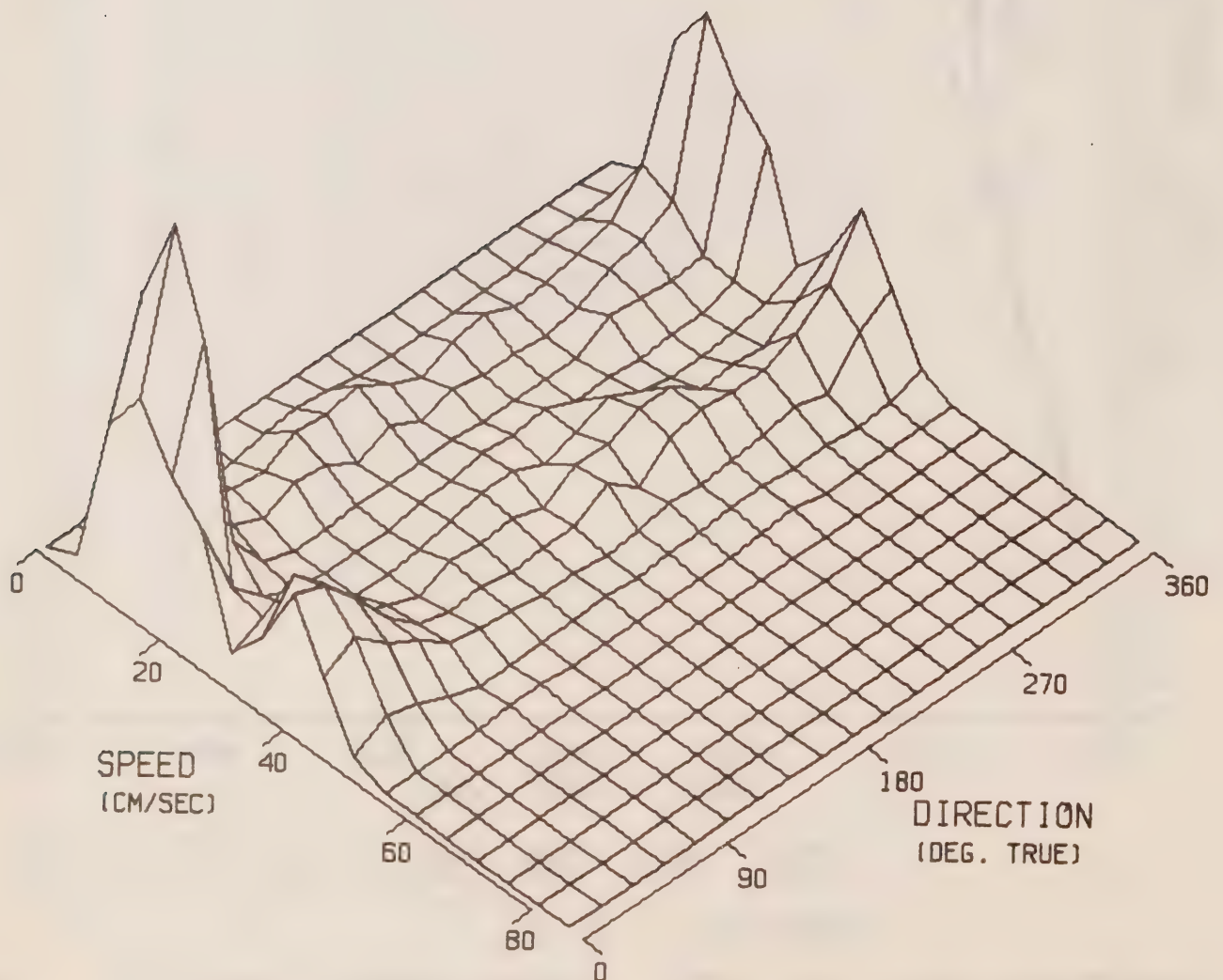


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 26/ 2/73

NO. OF SAMPLES = 1367



STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 26/ 2/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	004	076	100	022	027	027	003						259
15- 29	001	132	072	017	035	040	009						306
30- 44	007	027	018	008	037	019	004						120
45- 59	002	016	005	006	010	022	003						64
60- 74		011		002	007	015	002						37
75- 89	002	004			002	007							15
90-104		005	001		001	004	001						12
105-119	001	016	001		002	005							25
120-134	001	005		001	003	002							12
135-149	003	005	001	004	003	001							17
150-164	004	009		004	005	002	001						25
165-179	001	008	001	006		001							17
180-194		002	002	009	004	003							20
195-209		002		001	007	004	001						15
210-224		004		007	008	001	001						21
225-239		001		002	009	006							18
240-254	001	008		007	011	009	004						40
255-269				002	012	005	003						22
270-284		001	001	001	008	008							19
285-299		008	009		007	004	001						29
300-314	002	003	007	001	007	010	001						31
315-329	001	013	004	002	005	010							35
330-344	006	020	008	004	019	014	001						72
345-359		043	019	017	019	038							136
	36		249		248		35		0		0		1367
		419		123		257			0		0		0

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 26/02/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	30	60	90	120	150
7	0 0	.	.	.	.	.
21	0 0					
35	1 0					
49	1 0					
63	14 1	*****				
77	32 2	*****				
91	74 5	*****				
105	75 5	*****				
119	97 7	*****				
133	61 4	*****				
147	85 6	*****				
161	53 4	*****				
175	34 2	*****				
189	68 5	*****				
203	44 3	*****				
217	45 3	*****				
231	20 1	*****				
245	24 2	*****				
259	25 2	*****				
273	19 1	*****				
287	18 1	*****				
301	15 1	*****				
315	28 2	*****				
329	42 3	*****				
343	36 3	*****				
357	53 4	*****				
371	37 3	*****				
385	57 4	*****				
399	52 4	*****				
413	52 4	*****				
427	66 5	*****				
441	36 3	*****				
455	39 3	*****				
469	25 2	*****				
483	12 1	****				
497	10 1	***				
511	8 1	**				
525	7 1	*				
539	2 0					
553	0 0					

NO. OF SAMPLES OVER 540 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1367  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 26/02/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	183	13	*****	*****	*****	*****	*****
15	233	17	*****	*****	*****	*****	*****
25	159	12	*****	*****	*****	*****	*****
35	83	6	*****	*****	*****	*****	*****
45	60	4	*****	*****	*****	*****	*****
55	36	3	*****	*****	*****	*****	*****
65	24	2	*****	*****	*****	*****	*****
75	16	1	***	*****	*****	*****	*****
85	8	1	**	*****	*****	*****	*****
95	7	1	*	*****	*****	*****	*****
105	11	1	**	*****	*****	*****	*****
115	23	2	*****	*****	*****	*****	*****
125	6	0	*	*****	*****	*****	*****
135	10	1	**	*****	*****	*****	*****
145	12	1	**	*****	*****	*****	*****
155	14	1	***	*****	*****	*****	*****
165	19	1	****	*****	*****	*****	*****
175	5	0	*	*****	*****	*****	*****
185	12	1	**	*****	*****	*****	*****
195	15	1	***	*****	*****	*****	*****
205	9	1	**	*****	*****	*****	*****
215	15	1	***	*****	*****	*****	*****
225	10	1	**	*****	*****	*****	*****
235	14	1	***	*****	*****	*****	*****
245	26	2	*****	*****	*****	*****	*****
255	21	2	****	*****	*****	*****	*****
265	14	1	***	*****	*****	*****	*****
275	15	1	***	*****	*****	*****	*****
285	16	1	***	*****	*****	*****	*****
295	20	1	****	*****	*****	*****	*****
305	23	2	*****	*****	*****	*****	*****
315	16	1	***	*****	*****	*****	*****
325	31	2	*****	*****	*****	*****	*****
335	48	4	*****	*****	*****	*****	*****
345	49	4	*****	*****	*****	*****	*****
355	104	8	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1367  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 26/02/73

MEDIAN (DEG.C)	FREQINCY NO.	PCT	70	140	210	280	350
6.41	0	0	.	.	.	.	.
6.43	0	0					
6.45	0	0					
6.47	0	0					
6.49	1	0					
6.51	2	0					
6.53	16	1	**				
6.55	65	5	*****				
6.57	38	3	*****				
6.59	69	5	*****				
6.61	55	4	*****				
6.63	0	0					
6.65	93	7	*****				
6.67	140	10	*****				
6.69	278	20	*****				
6.71	322	24	*****				
6.73	228	17	*****				
6.75	35	3	*****				
6.77	4	0	*				
6.79	0	0					
6.81	3	0					
6.83	5	0	*				
6.85	2	0					
6.87	1	0					
6.89	2	0					
6.91	1	0					
6.93	1	0					
6.95	0	0					
6.97	0	0					
6.99	4	0	*				
7.01	1	0					
7.03	0	0					
7.05	1	0					
7.07	0	0					
7.09	0	0					
7.11	0	0					
7.13	0	0					
7.15	0	0					
7.17	0	0					
7.19	0	0					

NO. OF SAMPLES OVER 7.20 = 0

NO. OF SAMPLES UNDER 6.40 = 0

TOTAL NO. OF OBSERVATIONS = 1367

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 26/02/73

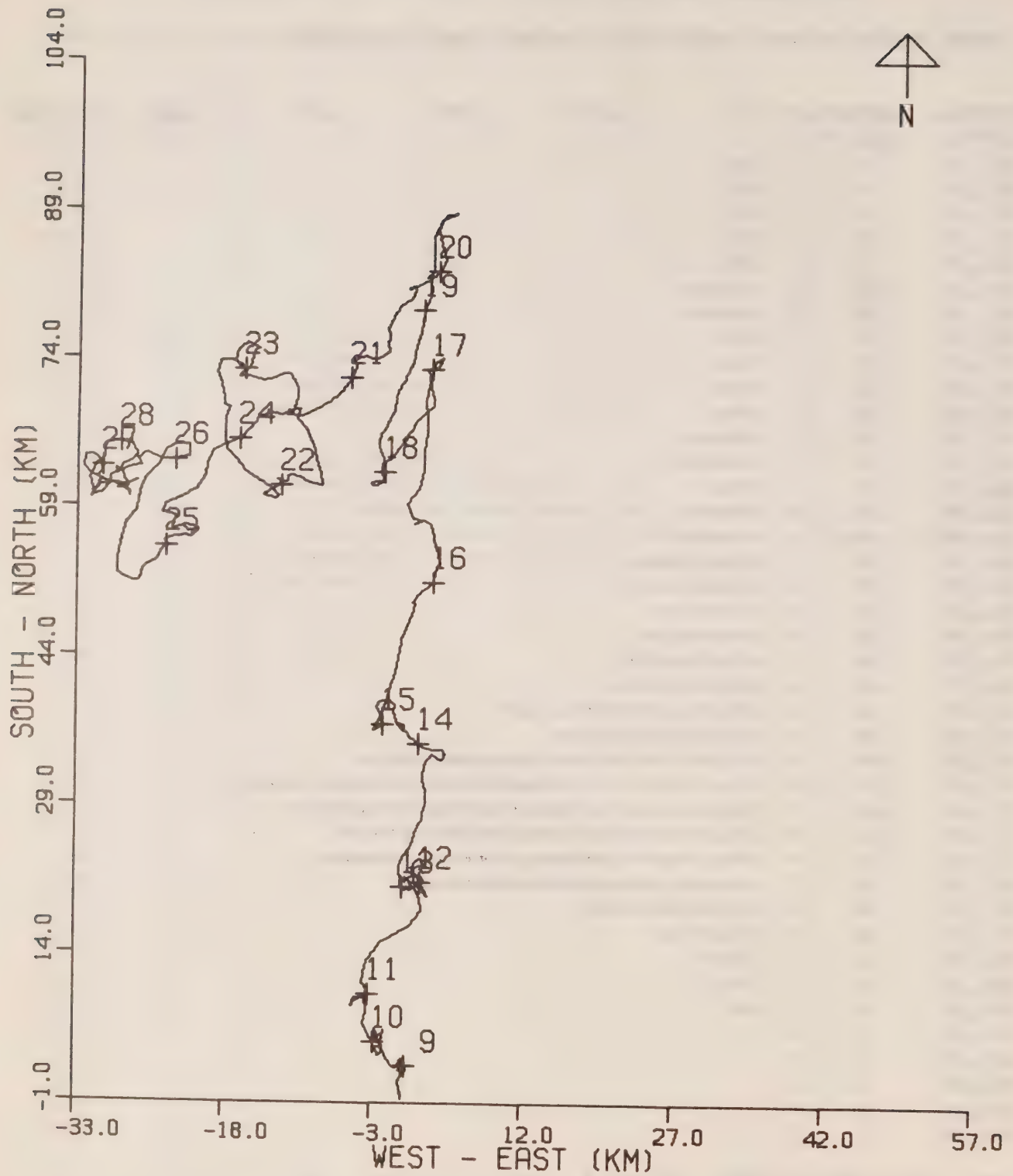
MEDIAN (PPT)	FREQUENCY NO.	PCT	40	80	120	160	200
24.85	8	1	•	•	•	•	•
24.95	6	0					
25.05	6	0					
25.15	10	1					
25.25	7	1					
25.35	22	2					
25.45	19	1					
25.55	10	1					
25.65	11	1					
25.75	16	1					
25.85	12	1					
25.95	18	1					
26.05	22	2					
26.15	14	1					
26.25	21	2					
26.35	19	1					
26.45	30	2					
26.55	37	3					
26.65	27	2					
26.75	33	2					
26.85	36	3					
26.95	45	3					
27.05	72	5					
27.15	54	4					
27.25	106	8					
27.35	141	10					
27.45	126	9					
27.55	111	8					
27.65	119	9					
27.75	92	7					
27.85	46	3					
27.95	26	2					
28.05	17	1					
28.15	16	1					
28.25	8	1					
28.35	0	0					
28.45	1	0					
28.55	0	0					
28.65	0	0					
28.75	0	0					

NO. OF SAMPLES OVER 28.80 = 0

NO. OF SAMPLES UNDER 24.80 = 3

TOTAL NO. OF OBSERVATIONS = 1367

SAMPLE INTERVAL = 10 MINUTES



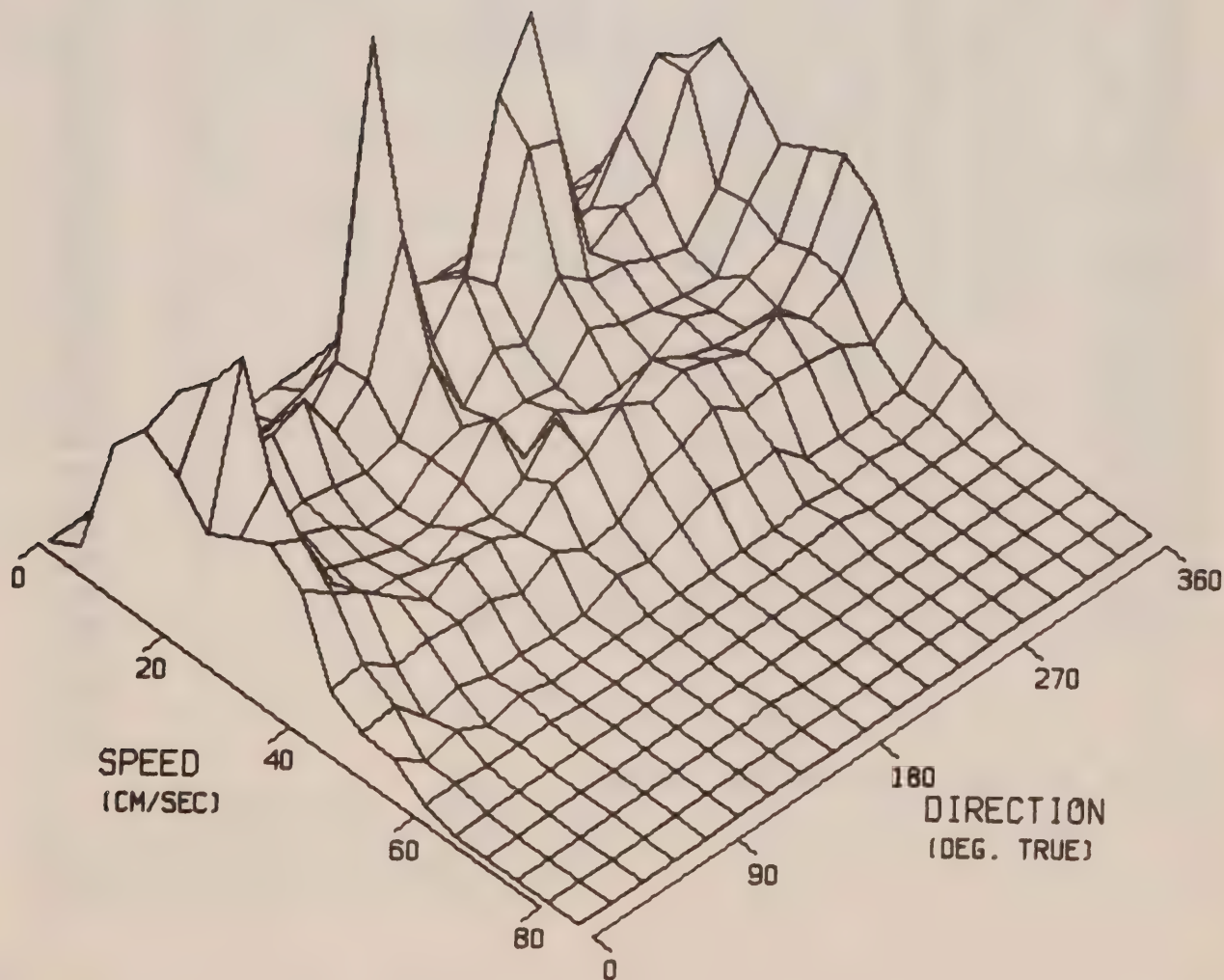
STN. NO. HS-5N

DEPTH 5 M.

STARTING DATE: 8/ 3/73      ENDING DATE: 28/ 3/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 5 M.  
STARTING DATE: 8/ 3/73  
NO. OF SAMPLES = 2879





STN. NO. H8-5N DEPTH 5 M.

STARTING DATE: 8/ 3/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	002	043	059	051	044	035	016						250
15- 29	005	039	077	075	033	022	008	001					260
30- 44	007	032	019	026	022	013	004	003					126
45- 59	003	035	013	014	015	013	001	001					95
60- 74	002	024	013	017	010	018	005	002					91
75- 89	002	019	009	010	010	009		001					60
90-104	001	025	010	003	011	017							67
105-119	001	016	012	009	009	011							58
120-134	003	014	006	009	010	010							52
135-149	006	030	008	009	013	010							76
150-164	016	108	026	024	014	011	003			001			203
165-179	003	051	020	014	020	013	001						122
180-194	002	017	008	007	017	013	005						69
195-209	003	041	023	012	011	025	001						116
210-224		024	013	008	018	017	007						87
225-239	001	014	018	012	020	016	006						87
240-254	013	123	031	017	027	029	004	001					245
255-269		072	029	008	020	018	009	002					158
270-284	002	016	014	017	010	016							75
285-299	004	015	015	010	016	025	002						87
300-314	004	022	018	012	013	020							89
315-329	007	031	012	011	012	015							88
330-344	004	046	030	023	020	008	002	001					134
345-359	005	057	031	029	032	024	004	002					184
	96		514		427		78		0		0		2879
		914		427		408		14		1		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 08/03/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	60	120	180	240	300
8	0 0	.	.	.	.	.
24	1 0					
40	6 0	*				
56	34 1	*****				
72	55 2	*****				
88	132 5	*****				
104	199 7	*****				
120	235 8	*****				
136	200 7	*****				
152	148 5	*****				
168	124 4	*****				
184	106 4	*****				
200	107 4	*****				
216	97 3	*****				
232	97 3	*****				
248	76 3	*****				
264	84 3	*****				
280	66 2	*****				
296	84 3	*****				
312	100 3	*****				
328	78 3	*****				
344	107 4	*****				
360	76 3	*****				
376	88 3	*****				
392	108 4	*****				
408	83 3	*****				
424	106 4	*****				
440	89 3	*****				
456	54 2	*****				
472	46 2	*****				
488	26 1	****				
504	20 1	***				
520	17 1	***				
536	7 0	*				
552	9 0	**				
568	3 0	*				
584	8 0	*				
600	1 0					
616	1 0					
632	0 0					

NO. OF SAMPLES OVER 640 = 1  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2879  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 08/03/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	181	6	*****				
15	184	6	*****				
25	154	5	*****				
35	85	3	*****				
45	72	3	*****				
55	60	2	*****				
65	57	2	*****				
75	50	2	*****				
85	45	2	*****				
95	40	1	*****				
105	48	2	*****				
115	38	1	*****				
125	28	1	*****				
135	47	2	*****				
145	54	2	*****				
155	138	5	*****				
165	114	4	*****				
175	71	2	*****				
185	46	2	*****				
195	60	2	*****				
205	81	3	*****				
215	63	2	*****				
225	54	2	*****				
235	55	2	*****				
245	178	6	*****				
255	134	5	*****				
265	85	3	*****				
275	57	2	*****				
285	55	2	*****				
295	56	2	*****				
305	57	2	*****				
315	58	2	*****				
325	66	2	*****				
335	88	3	*****				
345	108	4	*****				
355	112	4	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2879  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 08/03/73

MEDIAN (DEG.C)	FREQINCY NO.	PCT	120	240	360	480	600
6.22	0	0	.	.	.	.	.
6.26	0	0					
6.30	0	0					
6.34	0	0					
6.38	0	0					
6.42	0	0					
6.46	0	0					
6.50	0	0					
6.54	3	0					
6.58	5	0					
6.62	3	0					
6.66	2	0					
6.70	3	0					
6.74	120	4	*****				
6.78	100	3	*****				
6.82	129	4	*****				
6.86	56	2	*****				
6.90	142	5	*****				
6.94	161	6	*****				
6.98	178	6	*****				
7.02	539	19	*****	*****	*****	*****	*****
7.06	429	15	*****	*****	*****	*****	*****
7.10	346	12	*****	*****	*****	*****	*****
7.14	102	4	*****				
7.18	178	6	*****				
7.22	159	6	*****				
7.26	77	3	*****				
7.30	32	1	***				
7.34	24	1	**				
7.38	15	1	*				
7.42	11	0	*				
7.46	8	0	*				
7.50	12	0	*				
7.54	17	1	*				
7.58	11	0	*				
7.62	5	0					
7.66	3	0					
7.70	7	0	*				
7.74	2	0					
7.78	0	0					

NO. OF SAMPLES OVER 7.80 = 0  
 NO. OF SAMPLES UNDER 6.20 = 0  
 TOTAL NO. OF OBSERVATIONS = 2879  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 08/03/73

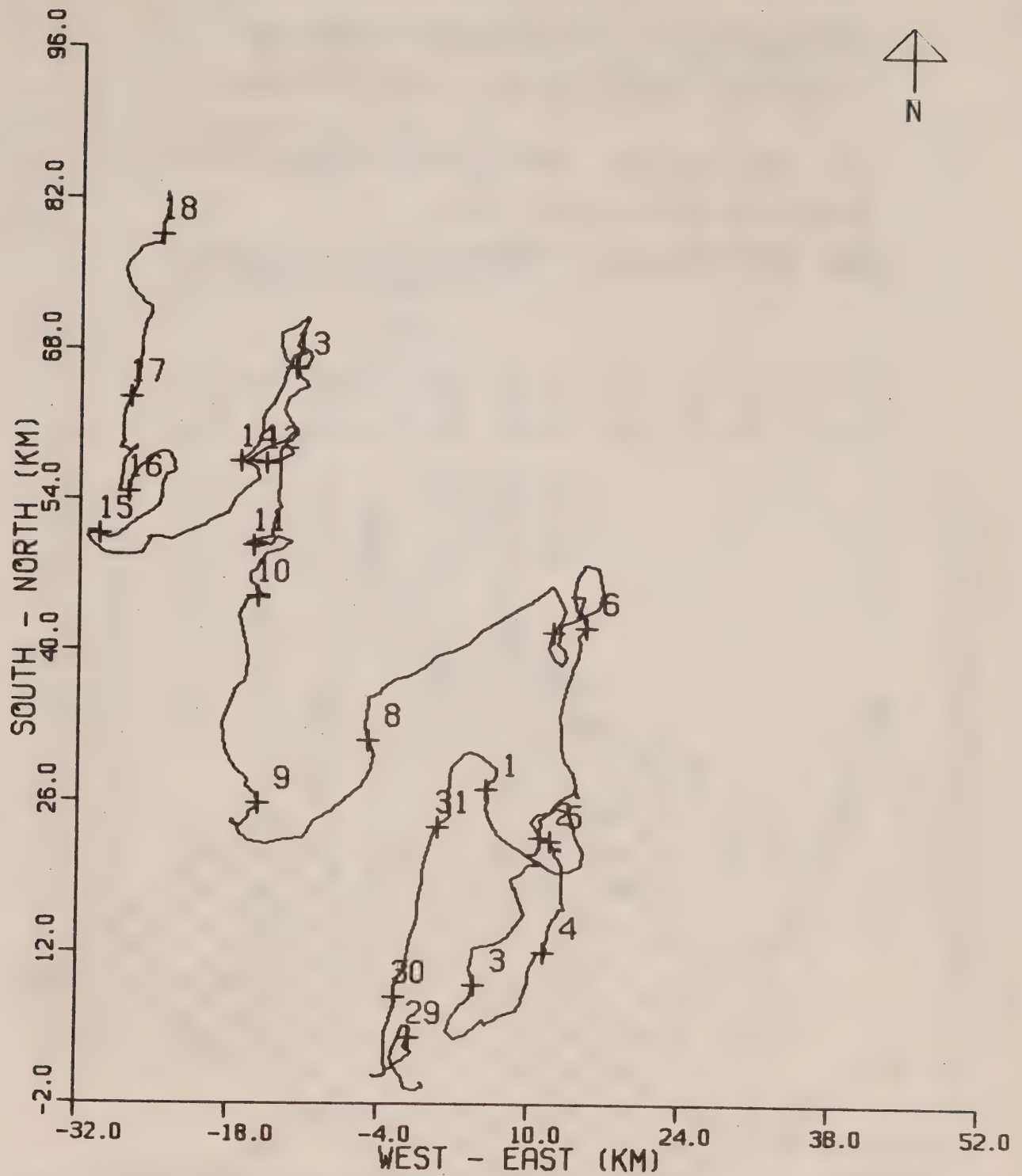
MEDIAN (PPT)	FREQUENCY NO. PCT	30	60	90	120	150
23.17	11 0	*****				
23.31	9 0	***				
23.45	21 1	*****				
23.59	33 1	*****				
23.73	42 1	*****				
23.87	50 2	*****				
24.01	41 1	*****				
24.15	58 2	*****				
24.29	37 1	*****				
24.43	33 1	*****				
24.57	42 1	*****				
24.71	50 2	*****				
24.85	46 2	*****				
24.99	66 2	*****				
25.13	71 2	*****				
25.27	63 2	*****				
25.41	93 3	*****				
25.55	114 4	*****				
25.69	109 4	*****				
25.83	83 3	*****				
25.97	105 4	*****				
26.11	103 4	*****				
26.25	88 3	*****				
26.39	81 3	*****				
26.53	112 4	*****				
26.67	102 4	*****				
26.81	95 3	*****				
26.95	105 4	*****				
27.09	103 4	*****				
27.23	110 4	*****				
27.37	128 4	*****				
27.51	113 4	*****				
27.65	83 3	*****				
27.79	95 3	*****				
27.93	85 3	*****				
28.07	81 3	*****				
28.21	50 2	*****				
28.35	64 2	*****				
28.49	59 2	*****				
28.63	12 0	***				

NO. OF SAMPLES OVER 28.70 = 0

NO. OF SAMPLES UNDER 23.10 = 33

TOTAL NO. OF OBSERVATIONS = 2879

SAMPLE INTERVAL = 10 MINUTES



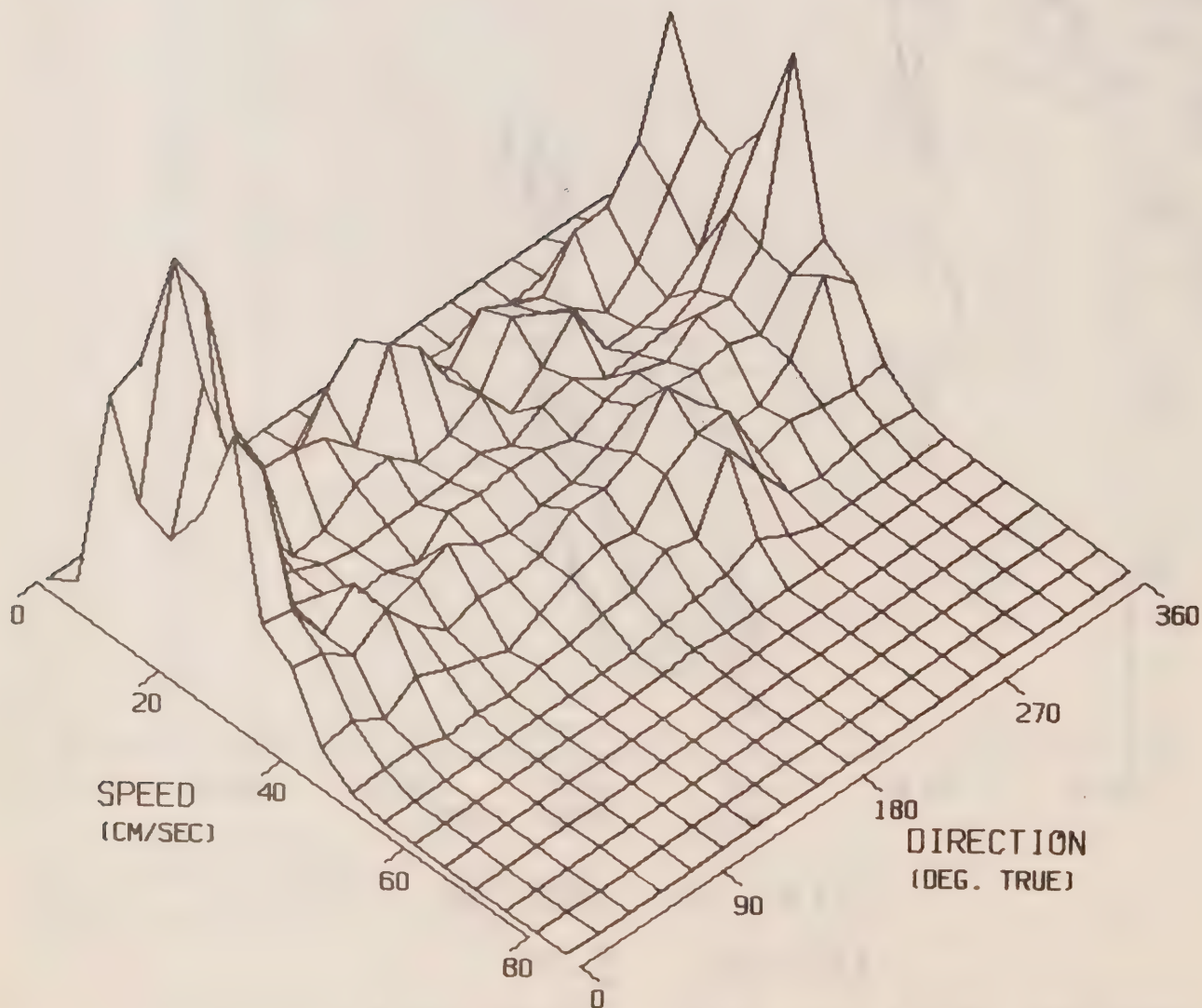
STN. NO. HS-5N

DEPTH 5 M.

STARTING DATE: 28/ 3/73      ENDING DATE: 18/ 4/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.  
STARTING DATE: 28/ 3/73  
NO. OF SAMPLES = 3000



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 28/ 3/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

		SPEED													
		000	080	160	240	320	400	480	560	640	720	800	880		
		TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO		
DIR		079	159	239	319	399	479	559	639	719	799	879	959		
0- 14		009	095	065	112	037	015	001						334	
15- 29		005	111	088	061	038	018	003						324	
30- 44		002	080	043	028	018	010	002						183	
45- 59		001	045	040	023	032	010	001						152	
60- 74		002	042	021	017	023	017							122	
75- 89		001	021	011	010	017	008							68	
90-104		002	023	013	017	011	007							73	
105-119			026	016	007	012	004	001						66	
120-134		001	018	015	014	021	004	002						75	
135-149		001	024	021	015	015	006	001						83	
150-164		002	045	012	016	006	008	003						92	
165-179			032	019	017	018	008	006						100	
180-194			018	019	020	020	015	006	001					99	
195-209			009	016	015	015	014	007	001					77	
210-224		001	009	009	011	021	021	009						81	
225-239		001	003	016	019	024	032	020						115	
240-254		001	043	016	023	027	033	021	002					166	
255-269			012	021	019	029	021	013						115	
270-284			009	006	015	017	013	002						62	
285-299			013	008	024	019	011	001						76	
300-314		004	022	007	017	025	010	002						87	
315-329		003	027	010	027	017	013	002						99	
330-344		003	042	026	038	038	011	002						160	
345-359		004	049	025	055	034	022	002						191	
		43		543		534		107		0		0		3000	
		818			620		331		4		0		0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 28/03/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
8	0	0	.	.	.	.	.
24	0	0					
40	0	0					
56	6	0	*				
72	37	1	*****				
88	90	3	*****				
104	175	6	*****				
120	188	6	*****				
136	200	7	*****				
152	165	6	*****				
168	137	5	*****				
184	121	4	*****				
200	106	4	*****				
216	99	3	*****				
232	105	4	*****				
248	83	3	*****				
264	108	4	*****				
280	123	4	*****				
296	135	5	*****				
312	146	5	*****				
328	101	3	*****				
344	122	4	*****				
360	110	4	*****				
376	118	4	*****				
392	109	4	*****				
408	54	2	*****				
424	81	3	*****				
440	69	2	*****				
456	48	2	*****				
472	53	2	*****				
488	39	1	*****				
504	36	1	*****				
520	20	1	****				
536	8	0	**				
552	5	0	*				
568	2	0					
584	0	0					
600	1	0					
616	0	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 28/03/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	60	120	180	240	300
5	224	7	*****	*****	*****	*****	*****
15	272	9	*****	*****	*****	*****	*****
25	173	6	*****	*****	*****	*****	*****
35	132	4	*****	*****	*****	*****	*****
45	101	3	*****	*****	*****	*****	*****
55	99	3	*****	*****	*****	*****	*****
65	80	3	*****	*****	*****	*****	*****
75	62	2	*****	*****	*****	*****	*****
85	46	2	*****	*****	*****	*****	*****
95	49	2	*****	*****	*****	*****	*****
105	44	1	*****	*****	*****	*****	*****
115	46	2	*****	*****	*****	*****	*****
125	47	2	*****	*****	*****	*****	*****
135	51	2	*****	*****	*****	*****	*****
145	59	2	*****	*****	*****	*****	*****
155	63	2	*****	*****	*****	*****	*****
165	76	3	*****	*****	*****	*****	*****
175	56	2	*****	*****	*****	*****	*****
185	66	2	*****	*****	*****	*****	*****
195	56	2	*****	*****	*****	*****	*****
205	53	2	*****	*****	*****	*****	*****
215	48	2	*****	*****	*****	*****	*****
225	62	2	*****	*****	*****	*****	*****
235	88	3	*****	*****	*****	*****	*****
245	111	4	*****	*****	*****	*****	*****
255	106	4	*****	*****	*****	*****	*****
265	59	2	*****	*****	*****	*****	*****
275	45	2	*****	*****	*****	*****	*****
285	45	2	*****	*****	*****	*****	*****
295	52	2	*****	*****	*****	*****	*****
305	55	2	*****	*****	*****	*****	*****
315	57	2	*****	*****	*****	*****	*****
325	72	2	*****	*****	*****	*****	*****
335	104	3	*****	*****	*****	*****	*****
345	115	4	*****	*****	*****	*****	*****
355	126	4	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N: DEPTH 5M. START DATE 28/03/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	70	140	210	280	350
7.04	49	2	*****	.	.	.	.
7.12	106	4	*****				
7.20	105	4	*****				
7.28	86	3	*****				
7.36	57	2	*****				
7.44	46	2	*****				
7.52	181	6	*****				
7.60	147	5	*****				
7.68	256	9	*****				
7.76	340	11	*****				
7.84	257	9	*****				
7.92	315	11	*****				
8.00	156	5	*****				
8.08	143	5	*****				
8.16	72	2	*****				
8.24	70	2	*****				
8.32	30	1	*****				
8.40	22	1	***				
8.48	9	0	*				
8.56	14	0	**				
8.64	12	0	**				
8.72	16	1	**				
8.80	21	1	***				
8.88	21	1	***				
8.96	39	1	*****				
9.04	56	2	*****				
9.12	82	3	*****				
9.20	94	3	*****				
9.28	77	3	*****				
9.36	63	2	*****				
9.44	20	1	***				
9.52	14	0	**				
9.60	2	0					
9.68	8	0	*				
9.76	6	0	*				
9.84	5	0	*				
9.92	1	0					
10.00	1	0					
10.08	1	0					
10.16	0	0					

NO. OF SAMPLES OVER 10.20 = 0

NO. OF SAMPLES UNDER 7.00 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 28/03/73

MEDIAN (PPT)	FREQUENCY NO. PCT	50	100	150	200	250
24.07	0 0	.	.	.	.	.
24.21	0 0					
24.35	0 0					
24.49	0 0					
24.63	0 0					
24.77	7 0	*				
24.91	27 1	*****				
25.05	36 1	*****				
25.19	48 2	*****				
25.33	33 1	*****				
25.47	32 1	*****				
25.61	42 1	*****				
25.75	35 1	*****				
25.89	85 3	*****				
26.03	81 3	*****				
26.17	117 4	*****				
26.31	112 4	*****				
26.45	128 4	*****				
26.59	120 4	*****				
26.73	102 3	*****				
26.87	117 4	*****				
27.01	169 6	*****				
27.15	241 8	*****				
27.29	221 7	*****				
27.43	235 8	*****				
27.57	220 7	*****				
27.71	182 6	*****				
27.85	85 3	*****				
27.99	94 3	*****				
28.13	68 2	*****				
28.27	73 2	*****				
28.41	130 4	*****				
28.55	110 4	*****				
28.69	50 2	*****				
28.83	0 0					
28.97	0 0					
29.11	0 0					
29.25	0 0					
29.39	0 0					
29.53	0 0					

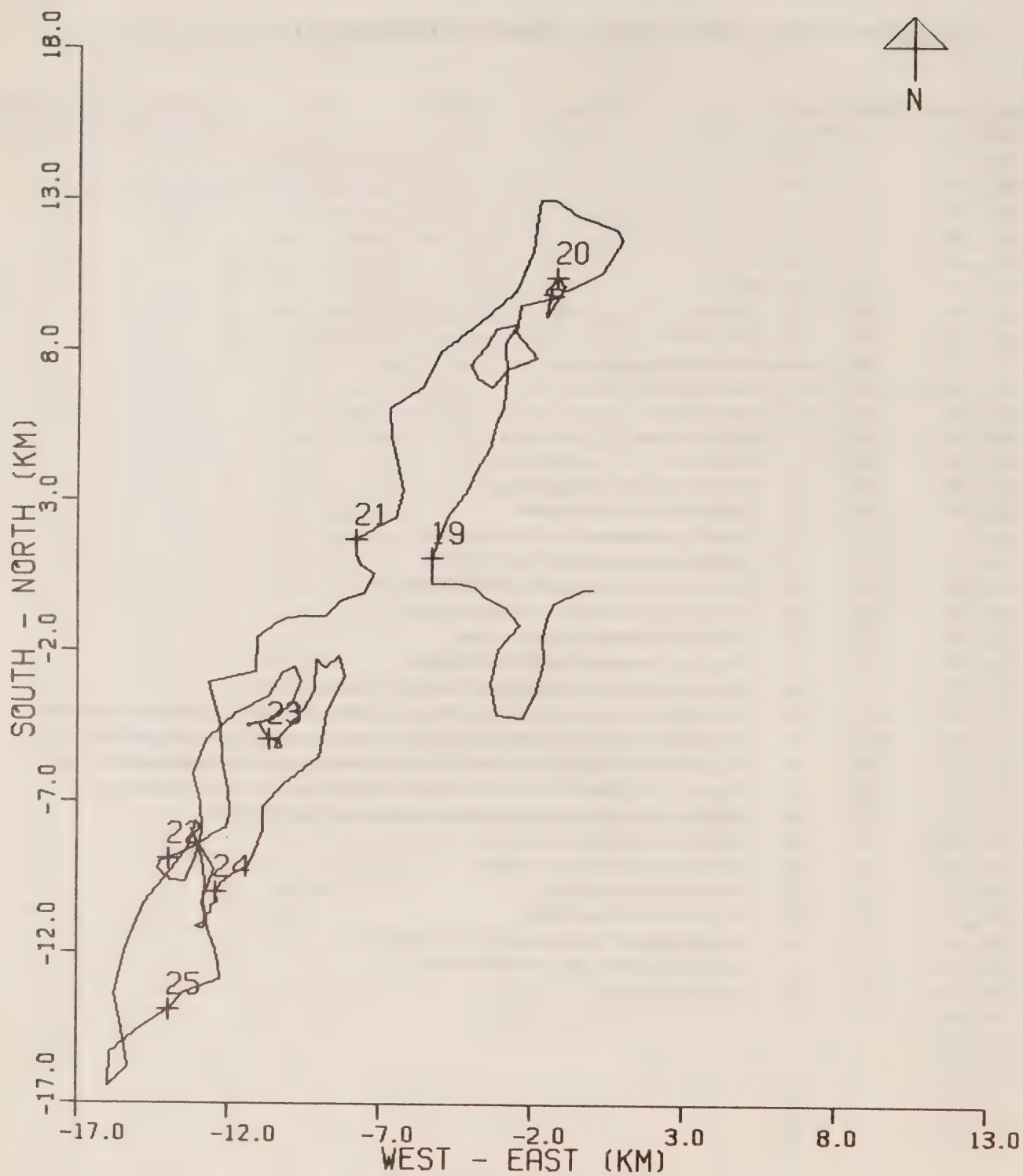
NO. OF SAMPLES OVER 29.60 = 0

NO. OF SAMPLES UNDER 24.00 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES





STN. NO. HS-5N

DEPTH 5 M.

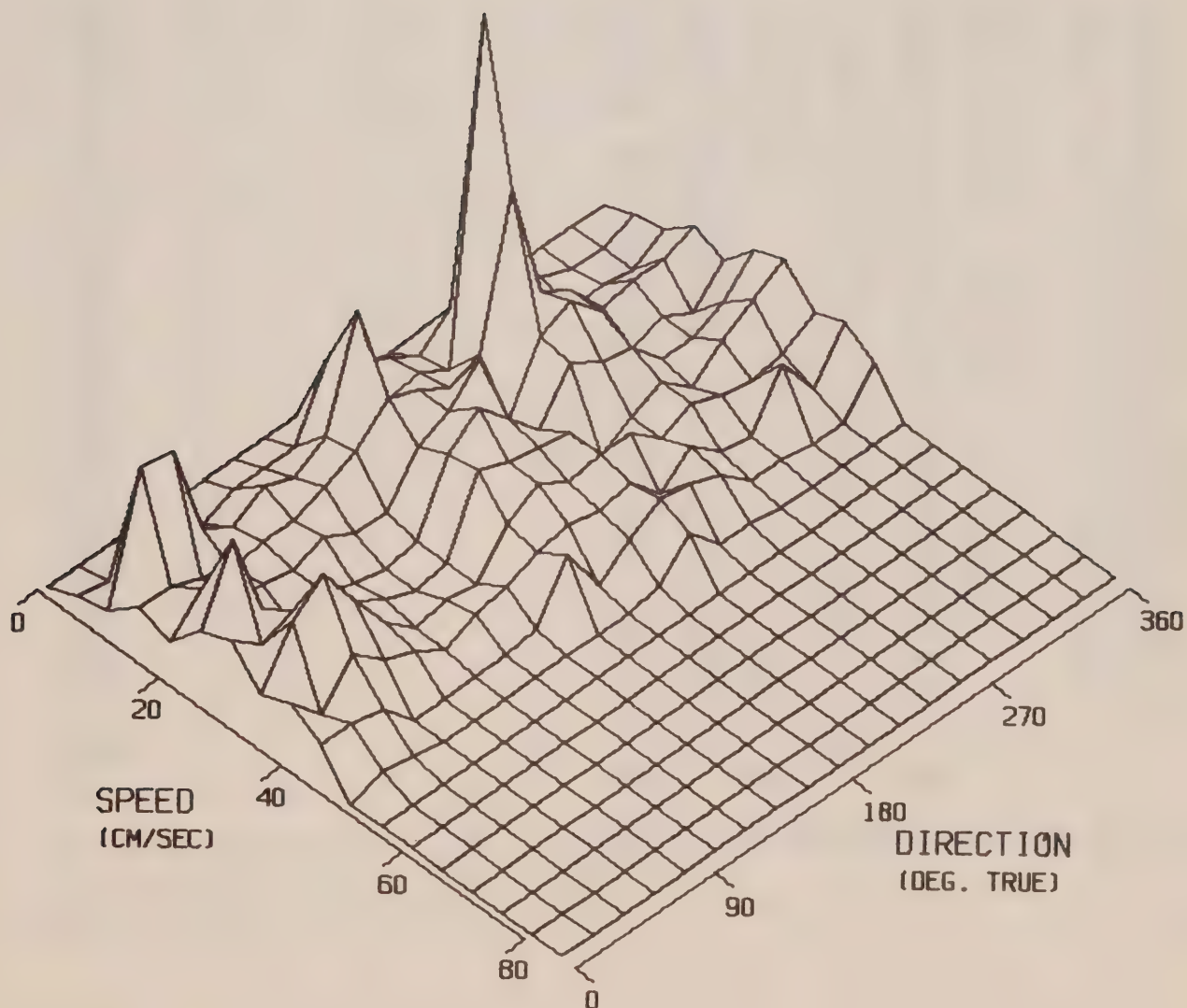
STARTING DATE: 18/ 4/73      ENDING DATE: 25/ 4/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 18/ 4/73

NO. OF SAMPLES = 1039



STN. NO. H3-5N DEPTH 5 M.

STARTING DATE: 18/ 4/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

DIR	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	002	013	009	014	015	009							62
15- 29	003	018	016	015	014	003	002						71
30- 44	006	019	007	007	022	011							72
45- 59	001	007	006	009	010	002	001						36
60- 74	001	007	002	005	015								30
75- 89	001	004	004	004	007	001							21
90-104	005	004	006	002	002								19
105-119	002	002	006		002	001							13
120-134		008	001		001	001							11
135-149	002	011	003		003	002							21
150-164	007	022	012	014	012	008							75
165-179	007	017	015	018	005	005							67
180-194	006	008	015	013	010	004							56
195-209	007	011	013	010	010	007	001						59
210-224	003	011	006	008	008	009	002						47
225-239	001	015	006	007	010	011	001						51
240-254	015	082	024	008	006	008							143
255-269	006	005	013	008	006	004							42
270-284	002	006	014	010	004	002							38
285-299	002	004	004	004	008								22
300-314	002	003	002	002	002	001							12
315-329		006	003	006	006	004							25
330-344		004		006	007								17
345-359		004	005	012	005	003							29
	81		192		190		7		0		0		1039
	291		182		96		0		0		0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 18/04/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	20	40	60	80	100
8	0	0	.	.	.	.	.
24	2	0	*				
40	15	1	*****				
56	27	3	*****				
72	37	4	*****				
88	49	5	*****				
104	61	6	*****				
120	75	7	*****				
136	50	5	*****				
152	56	5	*****				
168	34	3	*****				
184	40	4	*****				
200	44	4	*****				
216	33	3	*****				
232	54	5	*****				
248	31	3	*****				
264	35	3	*****				
280	26	3	*****				
296	41	4	*****				
312	36	3	*****				
328	41	4	*****				
344	39	4	*****				
360	47	5	*****				
376	38	4	*****				
392	33	3	*****				
408	13	1	*****				
424	21	2	*****				
440	24	2	*****				
456	16	2	*****				
472	14	1	*****				
488	3	0	**				
504	4	0	**				
520	0	0					
536	0	0					
552	0	0					
568	0	0					
584	0	0					
600	0	0					
616	0	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1039  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 18/04/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	20	40	60	80	100
5	42	4	*****				
15	47	5	*****				
25	49	5	*****				
35	50	5	*****				
45	38	4	*****				
55	16	2	*****				
65	23	2	*****				
75	13	1	*****				
85	14	1	*****				
95	13	1	*****				
105	9	1	*****				
115	12	1	*****				
125	7	1	****				
135	9	1	*****				
145	18	2	*****				
155	43	4	*****				
165	59	6	*****				
175	38	4	*****				
185	41	4	*****				
195	36	3	*****				
205	39	4	*****				
215	30	3	*****				
225	32	3	*****				
235	41	4	*****				
245	98	9	*****	*****			
255	58	6	*****				
265	22	2	*****				
275	24	2	*****				
285	26	3	*****				
295	9	1	*****				
305	9	1	*****				
315	16	2	*****				
325	14	1	*****				
335	11	1	*****				
345	14	1	*****				
355	19	2	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1039  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 18/04/73

MEDIAN (DEG.C)	FREQ'NCY NO.	PCT		40	80	120	160	200
8.37	3	0	*	.	.	.	.	.
8.41	1	0						
8.45	5	0	*					
8.49	6	1	**					
8.53	6	1	**					
8.57	1	0						
8.61	11	1	***					
8.65	10	1	***					
8.69	22	2	*****					
8.73	9	1	**					
8.77	20	2	*****					
8.81	33	3	*****					
8.85	36	3	*****					
8.89	14	1	****					
8.93	47	5	*****					
8.97	44	4	*****					
9.01	54	5	*****					
9.05	29	3	*****					
9.09	98	9	*****					
9.13	117	11	*****					
9.17	203	20	*****					
9.21	73	7	*****					
9.25	81	8	*****					
9.29	42	4	*****					
9.33	21	2	*****					
9.37	9	1	**					
9.41	7	1	**					
9.45	11	1	***					
9.49	2	0	*					
9.53	5	0	*					
9.57	4	0	*					
9.61	3	0	*					
9.65	2	0	*					
9.69	2	0	*					
9.73	2	0	*					
9.77	1	0						
9.81	0	0						
9.85	0	0						
9.89	3	0	*					
9.93	0	0						

NO. OF SAMPLES OVER 9.95 = 2

NO. OF SAMPLES UNDER 8.35 = 0

TOTAL NO. OF OBSERVATIONS = 1039

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M, START DATE 18/04/73

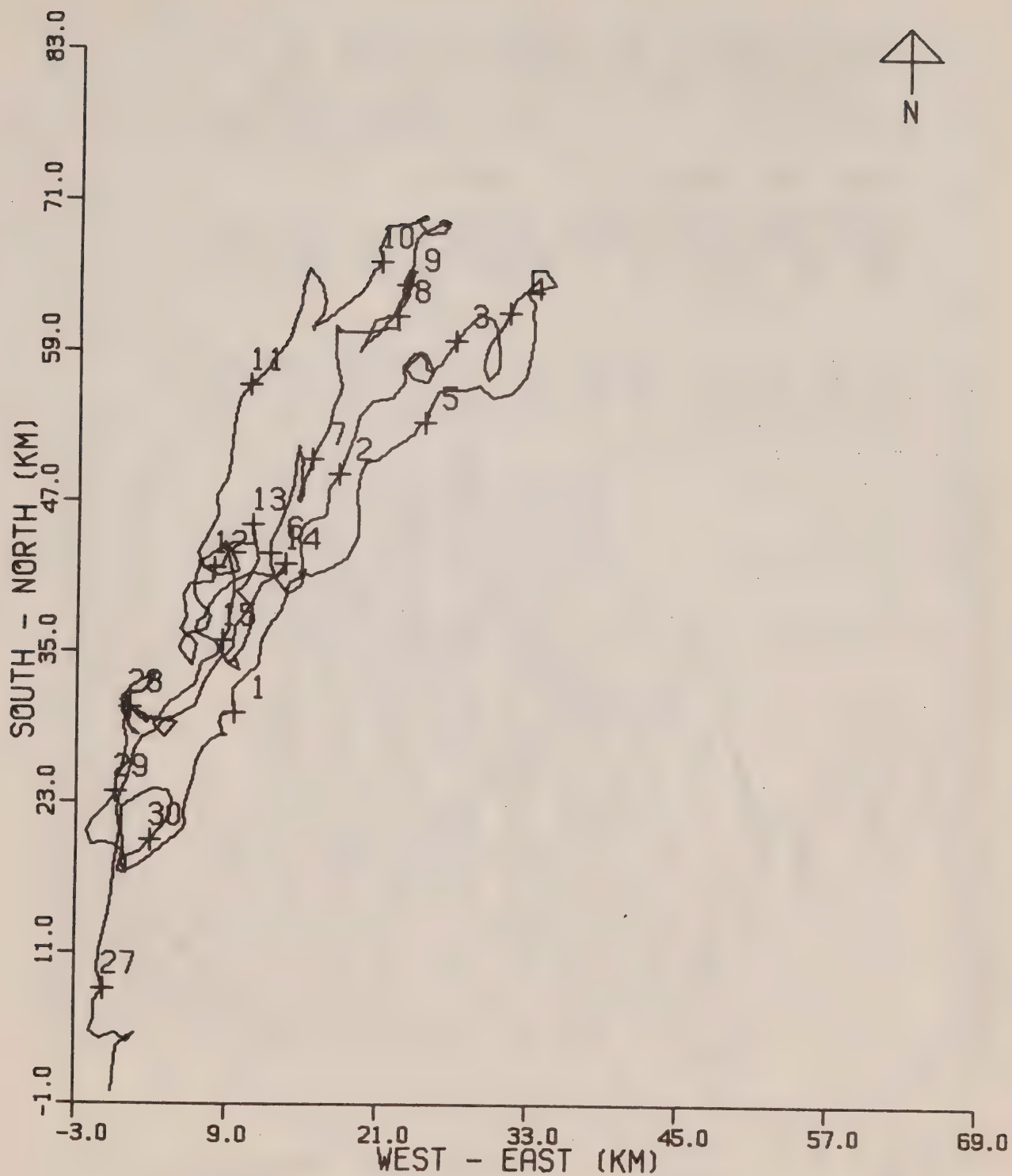
MEDIAN (PPT)	FREQUENCY NO. PCT .	30 .	60 .	90 .	120 .	150 .
24.24	0 0					
24.32	1 0					
24.40	0 0					
24.48	1 0					
24.56	0 0					
24.64	0 0					
24.72	0 0					
24.80	0 0					
24.88	2 0 *					
24.96	0 0					
25.04	1 0					
25.12	2 0 *					
25.20	1 0					
25.28	1 0					
25.36	2 0 *					
25.44	9 1 ***					
25.52	7 1 **					
25.60	11 1 *****					
25.68	13 1 *****					
25.76	22 2 *****					
25.84	48 5 *****					
25.92	61 6 *****					
26.00	74 7 *****					
26.08	114 11 *****					
26.16	151 15 *****					
26.24	128 12 *****					
26.32	90 9 *****					
26.40	65 6 *****					
26.48	63 6 *****					
26.56	38 4 *****					
26.64	39 4 *****					
26.72	27 3 *****					
26.80	17 2 *****					
26.88	25 2 *****					
26.96	16 2 *****					
27.04	5 0 **					
27.12	2 0 *					
27.20	3 0 *					
27.28	0 0					
27.36	0 0					

NO. OF SAMPLES OVER 27.40 = 0

NO. OF SAMPLES UNDER 24.20 = 0

TOTAL NO. OF OBSERVATIONS = 1039

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 5 M.

STARTING DATE: 26/ 4/73      ENDING DATE: 15/ 5/73

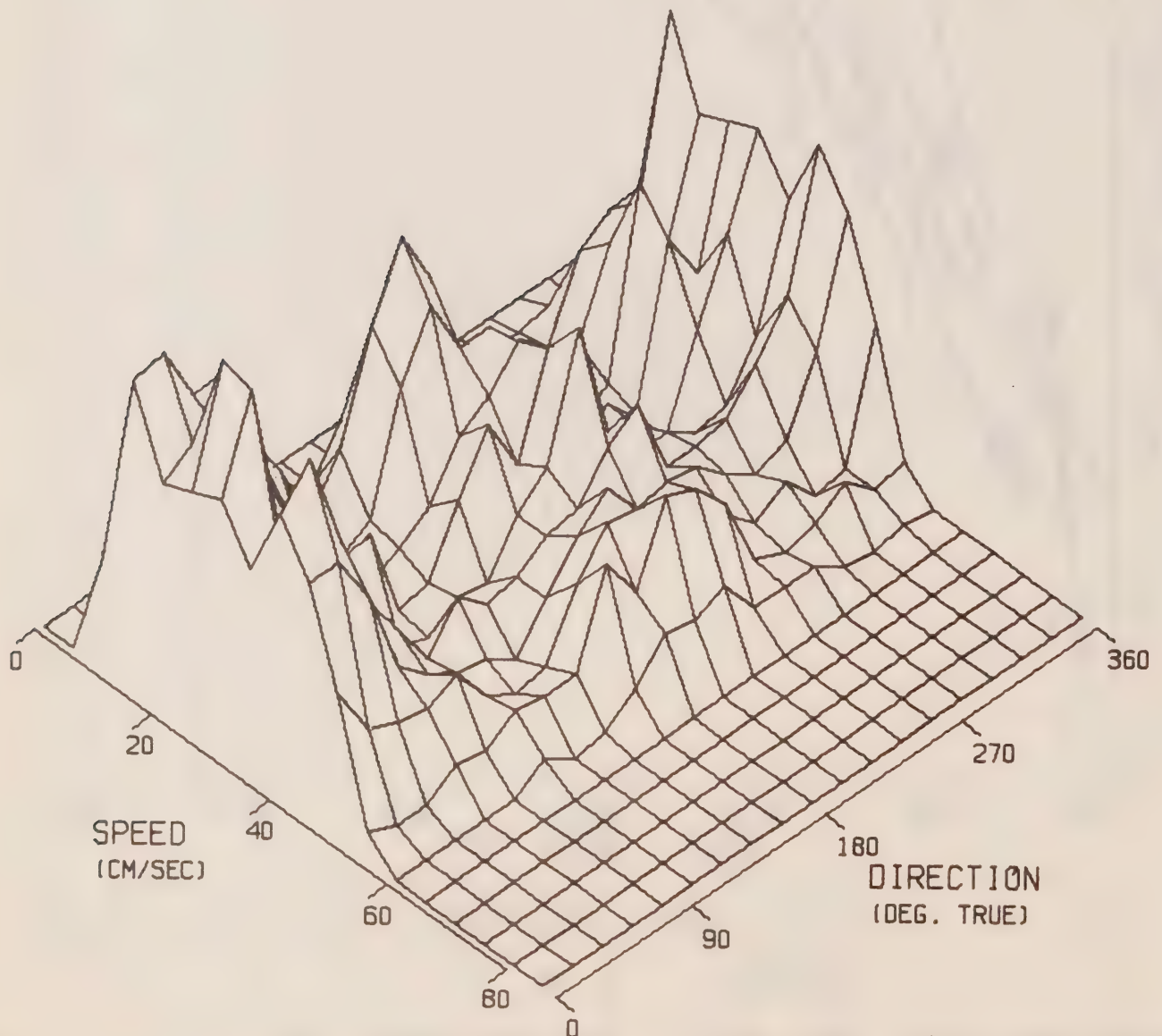


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 26/ 4/73

NO. OF SAMPLES = 2720



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE 126/ 4/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000 TO 079	080 TO 159	160 TO 239	240 TO 319	320 TO 399	400 TO 479	480 TO 559	560 TO 639	640 TO 719	720 TO 799	800 TO 879	880 TO 959	
0- 14		038	054	061	049	066	013	002					283
15- 29		047	041	062	035	043	011						239
30- 44	002	036	042	044	032	036	006						198
45- 59	003	028	037	028	019	025	014						154
60- 74	001	020	027	022	016	015	008						109
75- 89		012	025	020	015	009	013	001					95
90-104	001	013	009	023	007	009	006	001					69
105-119		007	002	006	004	004	008	004					35
120-134		010	009	004	008	006	006	001					44
135-149		011	010	005	006	006	009	001					48
150-164		029	024	008	008	006	016	006					97
165-179		022	041	020	004	014	019	006					126
180-194		043	026	022	015	021	021	008					156
195-209	003	027	025	024	019	023	028	014					163
210-224	013	013	022	028	030	021	016	018					161
225-239	002	011	019	028	029	013	011	010					123
240-254	003	009	006	011	017	021	020	010					97
255-269		002	002	003	008	012	006	004					37
270-284	002	004	002	007	008	010	002	003					38
285-299		007	004	003	010	006	008	003					41
300-314	001	005	005	006	004	013	002	004					40
315-329	003	015	035	026	016	011	005	003					114
330-344		031	016	021	015	018	003	001					105
345-359		023	029	038	027	021	010						148
	34	512	401	261	0	0	0	2720					
	463	520	429	100	0	0	0						

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M, START DATE 26/04/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	30	60	90	120	150
8	0 0	.	.	.	.	.
24	0 0					
40	0 0					
56	7 0	**				
72	27 1	*****				
88	38 1	*****				
104	69 3	*****				
120	119 4	*****				
136	122 4	*****				
152	115 4	*****				
168	118 4	*****				
184	111 4	*****				
200	107 4	*****				
216	103 4	*****				
232	104 4	*****				
248	77 3	*****				
264	100 4	*****				
280	100 4	*****				
296	120 4	*****				
312	92 3	*****				
328	80 3	*****				
344	80 3	*****				
360	83 3	*****				
376	81 3	*****				
392	96 4	*****				
408	74 3	*****				
424	93 3	*****				
440	94 3	*****				
456	90 3	*****				
472	59 2	*****				
488	66 2	*****				
504	62 2	*****				
520	47 2	*****				
536	43 2	*****				
552	58 2	*****				
568	36 1	*****				
584	29 1	*****				
600	14 1	*****				
616	6 0	**				
632	0 0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2720  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 26/04/73

MEDIAN (DEG.T)	FREQUNCY NO.	PCT	50	100	150	200	250
5	203	7	*****	*****	*****	*****	*****
15	173	6	*****	*****	*****	*****	*****
25	161	6	*****	*****	*****	*****	*****
35	137	5	*****	*****	*****	*****	*****
45	112	4	*****	*****	*****	*****	*****
55	100	4	*****	*****	*****	*****	*****
65	75	3	*****	*****	*****	*****	*****
75	64	2	*****	*****	*****	*****	*****
85	59	2	*****	*****	*****	*****	*****
95	44	2	*****	*****	*****	*****	*****
105	38	1	*****	*****	*****	*****	*****
115	17	1	***	*****	*****	*****	*****
125	35	1	*****	*****	*****	*****	*****
135	26	1	*****	*****	*****	*****	*****
145	35	1	*****	*****	*****	*****	*****
155	62	2	*****	*****	*****	*****	*****
165	80	3	*****	*****	*****	*****	*****
175	88	3	*****	*****	*****	*****	*****
185	110	4	*****	*****	*****	*****	*****
195	101	4	*****	*****	*****	*****	*****
205	102	4	*****	*****	*****	*****	*****
215	115	4	*****	*****	*****	*****	*****
225	103	4	*****	*****	*****	*****	*****
235	66	2	*****	*****	*****	*****	*****
245	72	3	*****	*****	*****	*****	*****
255	32	1	*****	*****	*****	*****	*****
265	27	1	*****	*****	*****	*****	*****
275	26	1	*****	*****	*****	*****	*****
285	30	1	*****	*****	*****	*****	*****
295	24	1	*****	*****	*****	*****	*****
305	21	1	****	*****	*****	*****	*****
315	53	2	*****	*****	*****	*****	*****
325	83	3	*****	*****	*****	*****	*****
335	68	3	*****	*****	*****	*****	*****
345	85	3	*****	*****	*****	*****	*****
355	93	3	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2720  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 26/04/73

MEDIAN (DEG.C)	FREQNCY NO.	PCT .	40 .	80 .	120 .	160 .	200 .
7.08	0	0					
7.24	12	0	***				
7.40	30	1	*****				
7.56	23	1	*****				
7.72	46	2	*****				
7.88	49	2	*****				
8.04	43	2	*****				
8.20	68	3	*****				
8.36	67	2	*****				
8.52	82	3	*****				
8.68	87	3	*****				
8.84	58	2	*****				
9.00	87	3	*****				
9.16	90	3	*****				
9.32	67	2	*****				
9.48	79	3	*****				
9.64	77	3	*****				
9.80	104	4	*****				
9.96	94	3	*****				
10.12	76	3	*****				
10.28	71	3	*****				
10.44	81	3	*****				
10.60	121	4	*****				
10.76	127	5	*****				
10.92	157	6	*****				
11.08	139	5	*****				
11.24	105	4	*****				
11.40	123	5	*****				
11.56	172	6	*****				
11.72	145	5	*****				
11.88	67	2	*****				
12.04	69	3	*****				
12.20	30	1	*****				
12.36	25	1	*****				
12.52	5	0	*				
12.68	34	1	*****				
12.84	10	0	***				
13.00	0	0					
13.16	0	0					
13.32	0	0					

NO. OF SAMPLES OVER 13.40 = 0

NO. OF SAMPLES UNDER 7.00 = 0

TOTAL NO. OF OBSERVATIONS = 2720

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 26/04/73

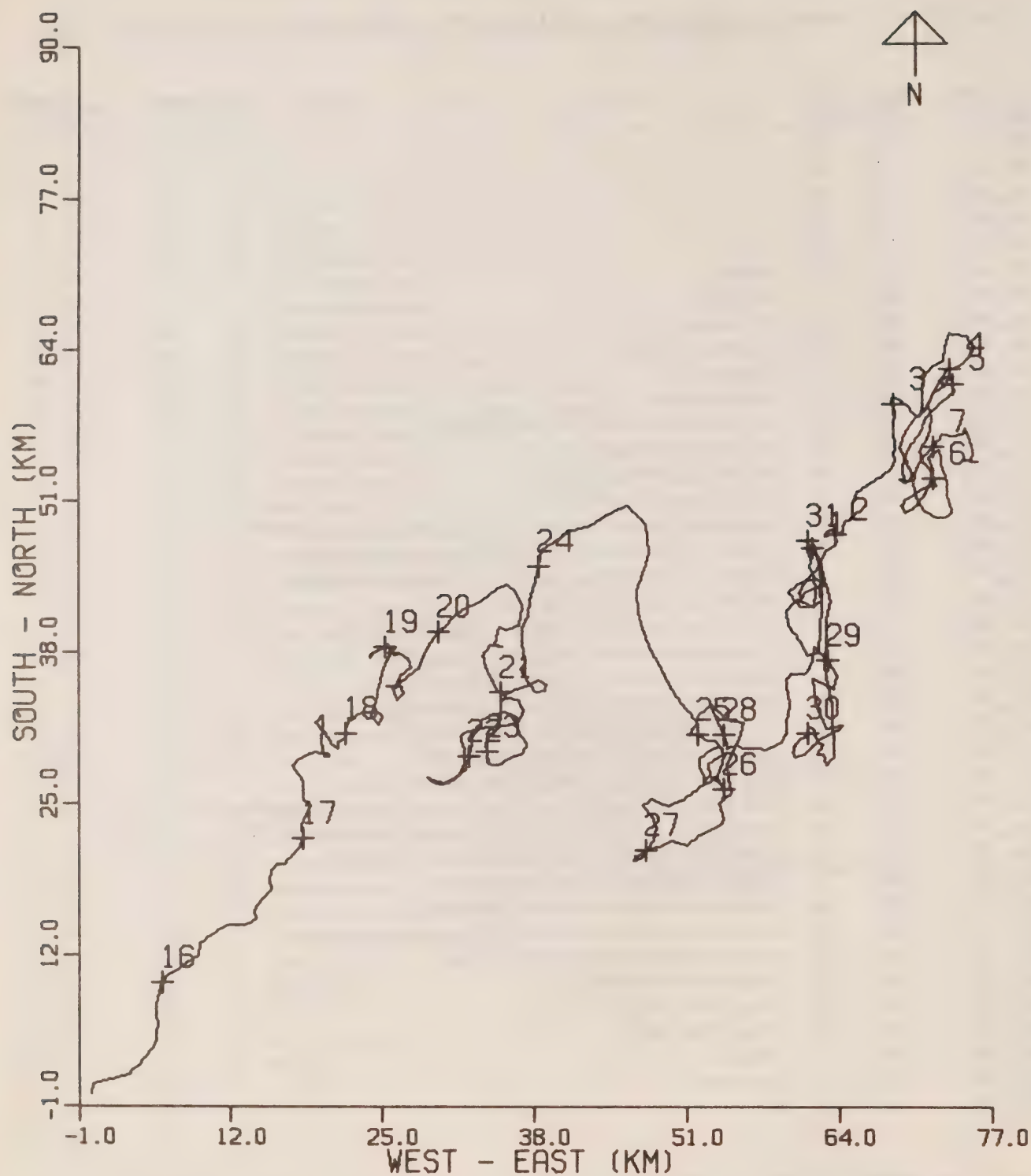
MEDIAN (PPT)	FREQUENCY		40	80	120	160	200
	NO.	PCT.					
18.15	0	0	.	.	.	.	.
18.45	0	0					
18.75	0	0					
19.05	0	0					
19.35	0	0					
19.65	16	1	*****				
19.95	27	1	*****				
20.25	29	1	*****				
20.55	42	2	*****				
20.85	28	1	*****				
21.15	34	1	*****				
21.45	96	4	*****				
21.75	68	3	*****				
22.05	67	2	*****				
22.35	69	3	*****				
22.65	138	5	*****				
22.95	130	5	*****				
23.25	133	5	*****				
23.55	77	3	*****				
23.85	117	4	*****				
24.15	100	4	*****				
24.45	109	4	*****				
24.75	103	4	*****				
25.05	106	4	*****				
25.35	96	4	*****				
25.65	112	4	*****				
25.95	159	6	*****				
26.25	133	5	*****				
26.55	118	4	*****				
26.85	95	3	*****				
27.15	96	4	*****				
27.45	132	5	*****				
27.75	92	3	*****				
28.05	62	2	*****				
28.35	50	2	*****				
28.65	42	2	*****				
28.95	20	1	*****				
29.25	22	1	*****				
29.55	2	0	*				
29.85	0	0					

NO. OF SAMPLES OVER 30.00 = 0

NO. OF SAMPLES UNDER 18.00 = 0

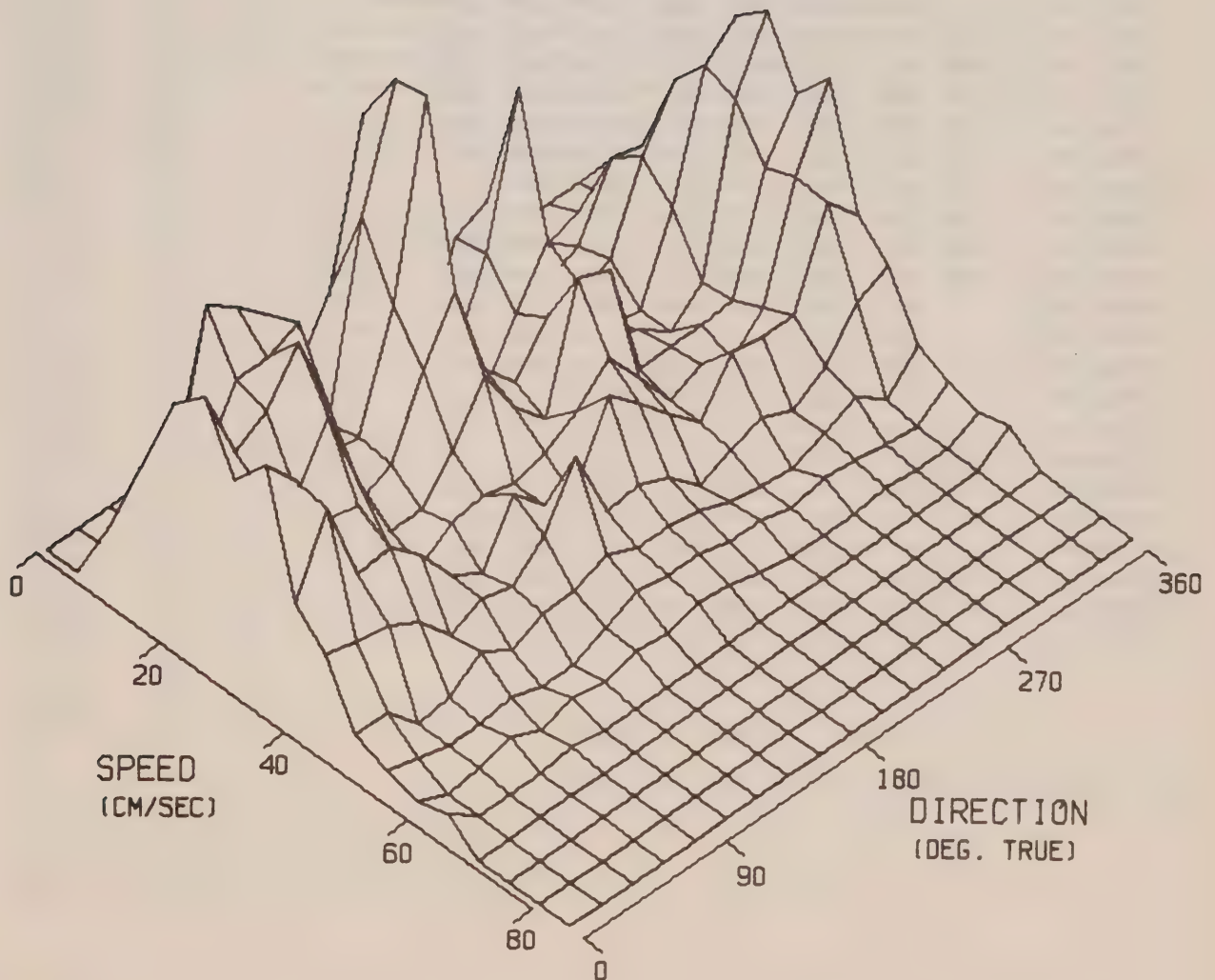
TOTAL NO. OF OBSERVATIONS = 2720

SAMPLE INTERVAL = 10 MINUTES



# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 5 M.  
STARTING DATE: 15/ 5/73  
NO. OF SAMPLES = 3336





STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 15/ 5/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

DIR	000 TO 079	080 TO 159	160 TO 239	240 TO 319	320 TO 399	400 TO 479	480 TO 559	560 TO 639	640 TO 719	720 TO 799	800 TO 879	880 TO 959	
0- 14			030	058	058	054	026	006	005	001			238
15- 29			017	031	044	044	031	007					174
30- 44			019	058	035	036	020	003	001				172
45- 59	004	070	058	055	039	024	001	003					254
60- 74	005	047	052	053	028	014	003	001					203
75- 89	002	054	061	035	017	008	006	001					184
90-104	003	038	021	010	013	016	002	002					105
105-119	001	016	020	013	006	007	002	001					66
120-134	003	040	018	019	018	006	004						108
135-149	006	039	048	024	014	021	006	004					162
150-164	016	071	082	041	015	024	008	003					260
165-179	002	055	057	026	010	017	009	002					178
180-194		003	022	020	009	009	007	006					76
195-209		007	005	015	023	020	004	003					77
210-224		032	022	032	025	015	005	001					132
225-239		027	024	034	019	010	004	001					119
240-254	002	059	039	033	011	002	002	001					149
255-269	003	029	018	011	006	008	001						76
270-284	001	002	004	009	011	011		002					40
285-299	001	003	003	011	011	011	002	001					43
300-314	001	015	002	007	005	004	002	001					37
315-329	005	022	021	009	011	018	004	001					91
330-344	002	036	047	038	036	019	003						181
345-359	001	019	051	054	050	028	005	003					211
	58	822		511		96		1	0	0			3336
	750		686		369		43		0		0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 15/05/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
10	0	0	.	.	.	.	.
30	3	0	*				
50	16	0	***				
70	39	1	*****				
90	119	4	*****				
110	194	6	*****				
130	242	7	*****				
150	195	6	*****				
170	207	6	*****				
190	222	7	*****				
210	212	6	*****				
230	226	7	*****				
250	152	5	*****				
270	161	5	*****				
290	174	5	*****				
310	154	5	*****				
330	138	4	*****				
350	143	4	*****				
370	129	4	*****				
390	125	4	*****				
410	88	3	*****				
430	121	4	*****				
450	68	2	*****				
470	68	2	*****				
490	34	1	*****				
510	25	1	*****				
530	28	1	*****				
550	17	1	***				
570	11	0	**				
590	13	0	***				
610	6	0	*				
630	5	0	*				
650	1	0					
670	0	0					
690	0	0					
710	0	0					
730	0	0					
750	0	0					
770	0	0					
790	0	0					

NO. OF SAMPLES OVER 800 = 0

NO. OF SAMPLES UNDER 0 = 0

TOTAL NO. OF OBSERVATIONS = 3336

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 15/05/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	181	5	*****	*****	*****	*****	*****
15	126	4	*****	*****	*****	*****	*****
25	116	3	*****	*****	*****	*****	*****
35	129	4	*****	*****	*****	*****	*****
45	135	4	*****	*****	*****	*****	*****
55	164	5	*****	*****	*****	*****	*****
65	143	4	*****	*****	*****	*****	*****
75	121	4	*****	*****	*****	*****	*****
85	124	4	*****	*****	*****	*****	*****
95	69	2	*****	*****	*****	*****	*****
105	45	1	*****	*****	*****	*****	*****
115	49	1	*****	*****	*****	*****	*****
125	52	2	*****	*****	*****	*****	*****
135	130	4	*****	*****	*****	*****	*****
145	95	3	*****	*****	*****	*****	*****
155	168	5	*****	*****	*****	*****	*****
165	193	6	*****	*****	*****	*****	*****
175	75	2	*****	*****	*****	*****	*****
185	45	1	*****	*****	*****	*****	*****
195	50	1	*****	*****	*****	*****	*****
205	56	2	*****	*****	*****	*****	*****
215	84	3	*****	*****	*****	*****	*****
225	99	3	*****	*****	*****	*****	*****
235	69	2	*****	*****	*****	*****	*****
245	131	4	*****	*****	*****	*****	*****
255	34	1	*****	*****	*****	*****	*****
265	52	2	*****	*****	*****	*****	*****
275	19	1	*****	*****	*****	*****	*****
285	34	1	*****	*****	*****	*****	*****
295	29	1	*****	*****	*****	*****	*****
305	20	1	*****	*****	*****	*****	*****
315	48	1	*****	*****	*****	*****	*****
325	71	2	*****	*****	*****	*****	*****
335	123	4	*****	*****	*****	*****	*****
345	130	4	*****	*****	*****	*****	*****
355	127	4	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3336  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 15/05/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	50	100	150	200	250
8.69	0	0	.	.	.	.	.
8.87	12	0	**				
9.05	30	1	*****				
9.23	32	1	*****				
9.41	32	1	*****				
9.59	18	1	****				
9.77	22	1	****				
9.95	44	1	*****				
10.13	45	1	*****				
10.31	78	2	*****				
10.49	88	3	*****				
10.67	150	4	*****				
10.85	151	5	*****				
11.03	146	4	*****				
11.21	218	7	*****				
11.39	205	6	*****				
11.57	195	6	*****				
11.75	203	6	*****				
11.93	166	5	*****				
12.11	154	5	*****				
12.29	165	5	*****				
12.47	196	6	*****				
12.65	149	4	*****				
12.83	121	4	*****				
13.01	152	5	*****				
13.19	73	2	*****				
13.37	71	2	*****				
13.55	82	2	*****				
13.73	87	3	*****				
13.91	103	3	*****				
14.09	56	2	*****				
14.27	48	1	*****				
14.45	10	0	**				
14.63	21	1	****				
14.81	7	0	*				
14.99	5	0	*				
15.17	1	0					
15.35	0	0					
15.53	0	0					
15.71	0	0					

NO. OF SAMPLES OVER 15.80 = 0  
 NO. OF SAMPLES UNDER 8.60 = 0  
 TOTAL NO. OF OBSERVATIONS = 3336  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 15/05/73

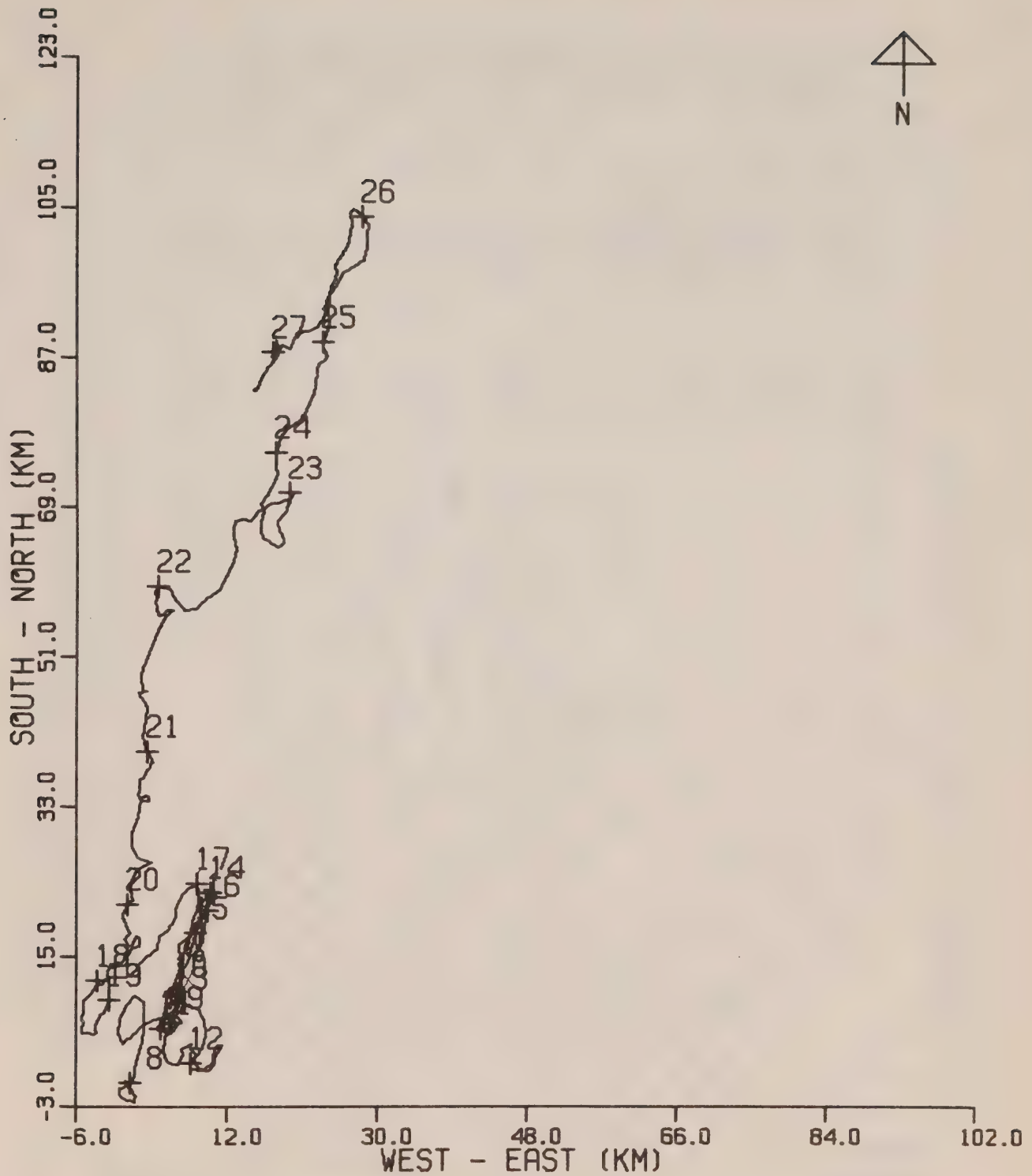
MEDIAN (PPT)	FREQUENCY			60	120	180	240	300
	NO.	PCT						
7.26	0	0		.	.	.	.	.
7.78	6	0	*					
8.30	6	0	*					
8.82	6	0	*					
9.34	8	0	*					
9.86	20	1	***					
10.38	12	0	**					
10.90	25	1	*****					
11.42	17	1	***					
11.94	16	0	***					
12.46	14	0	**					
12.98	14	0	**					
13.50	12	0	**					
14.02	28	1	*****					
14.54	45	1	*****					
15.06	67	2	*****					
15.58	40	1	*****					
16.10	33	1	*****					
16.62	57	2	*****					
17.14	52	2	*****					
17.66	45	1	*****					
18.18	89	3	*****					
18.70	100	3	*****					
19.22	96	3	*****					
19.74	169	5	*****					
20.26	177	5	*****					
20.78	208	6	*****					
21.30	238	7	*****					
21.82	241	7	*****					
22.34	241	7	*****					
22.86	214	6	*****					
23.38	261	8	*****					
23.90	153	5	*****					
24.42	104	3	*****					
24.94	159	5	*****					
25.46	171	5	*****					
25.98	101	3	*****					
26.50	56	2	*****					
27.02	34	1	*****					
27.54	1	0						

NO. OF SAMPLES OVER 27.80 = 0

NO. OF SAMPLES UNDER 7.00 = 0

TOTAL NO. OF OBSERVATIONS = 3336

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 5 M.

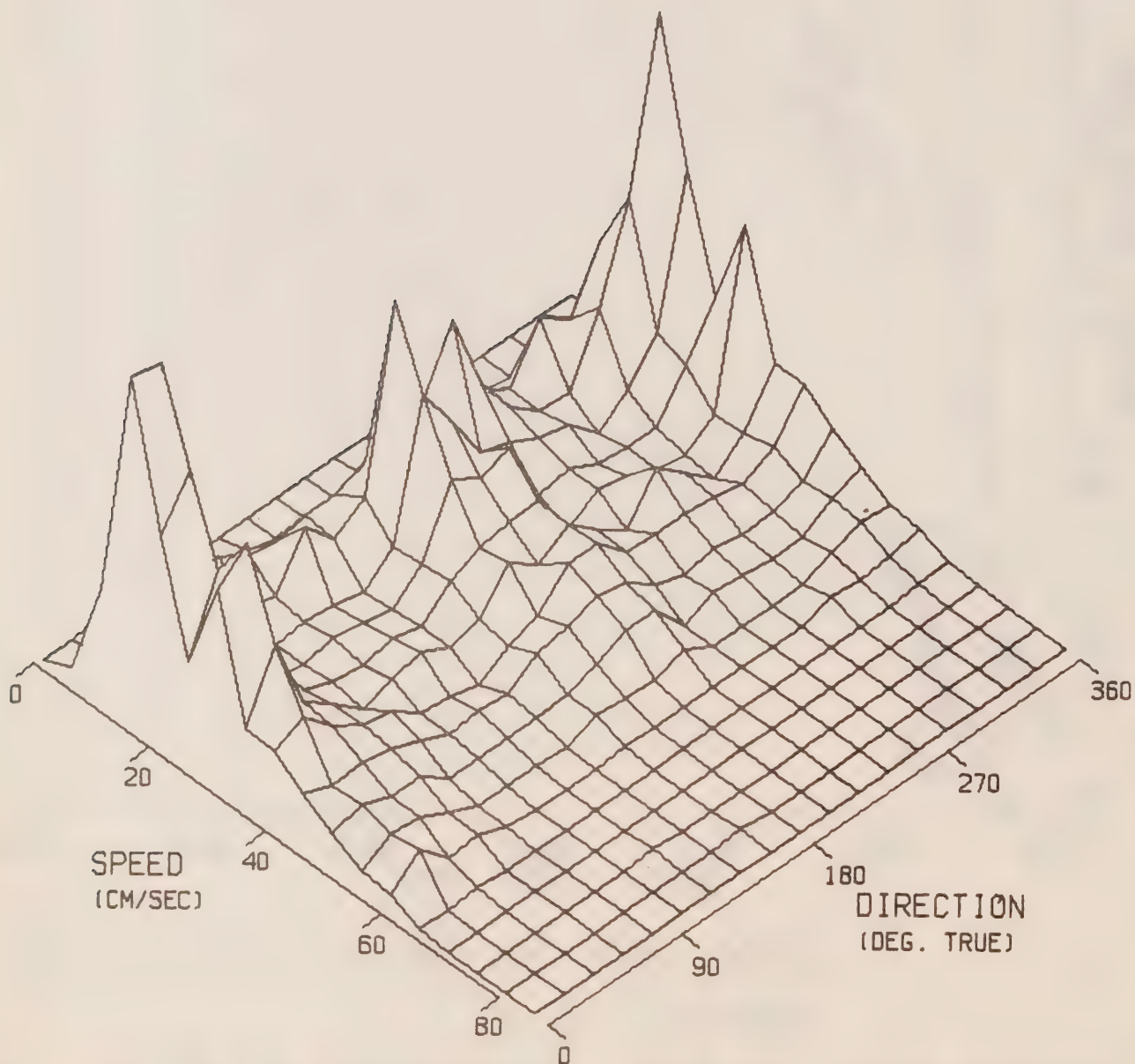
STARTING DATE: 7/ 6/73      ENDING DATE: 27/ 6/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 7/ 6/73

NO. OF SAMPLES = 2851



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 7/ 6/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO
DIR	079	159	239	319	399	479	559	639	719	799	879	959
0- 14	002	087	103	097	036	027	014	010				376
15- 29	001	081	096	070	048	023	014	011				344
30- 44	007	065	031	028	027	012	012	007				189
45- 59	005	024	014	015	020	026	006	007				117
60- 74	006	023	006	006	010	010	012	002				75
75- 89	003	021	009	008	011	009	002	001				64
90-104	001	015	008	009	007	003	002					45
105-119	003	012	009	015	009	009	004					61
120-134		025	009	004	007	005	002		001			53
135-149	001	017	002	006	004	002	002					34
150-164		022	009	010	005	012	004	001		001		64
165-179		035	053	023	016	009	005					141
180-194		046	053	034	023	016	009					181
195-209	001	034	046	029	018	015	008					151
210-224	001	046	029	028	019	020	008	001				152
225-239	001	036	028	018	016	022	006					127
240-254	001	024	021	004	005	006	002					63
255-269	002	022	012	016	004	009	001					66
270-284	002	011	007	009	015	006	003					53
285-299		022	006	005	014	008	002	001				58
300-314	001	022	004	007	007	003	002	003				49
315-329		038	009	003	004	007	002	003				66
330-344	005	060	023	010	008	011	006	003	001			127
345-359	004	076	039	030	019	013	010	004				195
	47		626		352		138		1		1	2851
		864		484		283		54		1		0

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 07/06/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	60	120	180	240	300
10	0 0	.	.	.	.	.
30	1 0					
50	4 0	*				
70	42 1	*****				
90	115 4	*****				
110	222 8	*****				
130	242 8	*****				
150	285 10	*****				
170	218 8	*****				
190	174 6	*****				
210	149 5	*****				
230	107 4	*****				
250	96 3	*****				
270	112 4	*****				
290	124 4	*****				
310	130 5	*****				
330	104 4	*****				
350	97 3	*****				
370	85 3	*****				
390	83 3	*****				
410	66 2	*****				
430	74 3	*****				
450	64 2	*****				
470	62 2	*****				
490	54 2	*****				
510	34 1	*****				
530	28 1	*****				
550	26 1	****				
570	17 1	***				
590	16 1	***				
610	12 0	**				
630	5 0	*				
650	0 0					
670	1 0					
690	0 0					
710	0 0					
730	0 0					
750	1 0					
770	0 0					
790	0 0					

NO. OF SAMPLES OVER 800 = 1  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2851  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 07/06/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	60	120	180	240	300
5	264	9	*****	*****	*****	*****	*****
15	281	10	*****	*****	*****	*****	*****
25	192	7	*****	*****	*****	*****	*****
35	130	5	*****	*****	*****	*****	*****
45	95	3	*****	*****	*****	*****	*****
55	72	3	*****	*****	*****	*****	*****
65	48	2	*****	*****	*****	*****	*****
75	46	2	*****	*****	*****	*****	*****
85	38	1	*****	*****	*****	*****	*****
95	35	1	*****	*****	*****	*****	*****
105	27	1	*****	*****	*****	*****	*****
115	43	2	*****	*****	*****	*****	*****
125	37	1	*****	*****	*****	*****	*****
135	25	1	****	*****	*****	*****	*****
145	26	1	****	*****	*****	*****	*****
155	43	2	*****	*****	*****	*****	*****
165	61	2	*****	*****	*****	*****	*****
175	108	4	*****	*****	*****	*****	*****
185	136	5	*****	*****	*****	*****	*****
195	102	4	*****	*****	*****	*****	*****
205	98	3	*****	*****	*****	*****	*****
215	90	3	*****	*****	*****	*****	*****
225	122	4	*****	*****	*****	*****	*****
235	60	2	*****	*****	*****	*****	*****
245	43	2	*****	*****	*****	*****	*****
255	47	2	*****	*****	*****	*****	*****
265	38	1	*****	*****	*****	*****	*****
275	30	1	*****	*****	*****	*****	*****
285	48	2	*****	*****	*****	*****	*****
295	34	1	*****	*****	*****	*****	*****
305	33	1	*****	*****	*****	*****	*****
315	32	1	*****	*****	*****	*****	*****
325	48	2	*****	*****	*****	*****	*****
335	93	3	*****	*****	*****	*****	*****
345	97	3	*****	*****	*****	*****	*****
355	129	5	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0

NO. OF SAMPLES UNDER 0 = 0

TOTAL NO. OF OBSERVATIONS = 2851

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 07/06/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT.	50	100	150	200	250
8.88	2	0	.	.	.	.	.
9.04	7	0	*				
9.20	8	0	**				
9.36	25	1	*****				
9.52	58	2	*****				
9.68	76	3	*****				
9.84	93	3	*****				
10.00	106	4	*****				
10.16	83	3	*****				
10.32	79	3	*****				
10.48	87	3	*****				
10.64	75	3	*****				
10.80	79	3	*****				
10.96	129	5	*****				
11.12	117	4	*****				
11.28	132	5	*****				
11.44	106	4	*****				
11.60	174	6	*****				
11.76	176	6	*****				
11.92	202	7	*****				
12.08	162	6	*****				
12.24	153	5	*****				
12.40	129	5	*****				
12.56	137	5	*****				
12.72	84	3	*****				
12.88	62	2	*****				
13.04	32	1	*****				
13.20	22	1	****				
13.36	51	2	*****				
13.52	82	3	*****				
13.68	44	2	*****				
13.84	34	1	*****				
14.00	21	1	****				
14.16	15	1	***				
14.32	6	0	*				
14.48	3	0	*				
14.64	0	0					
14.80	0	0					
14.96	0	0					
15.12	1	0					

NO. OF SAMPLES OVER 15.20 = 0

NO. OF SAMPLES UNDER 8.80 = 0

TOTAL NO. OF OBSERVATIONS = 2852

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M' START DATE 07/06/73

MEDIAN (PPT)	FREQUNCY NO.	PCT	40	80	120	160	200
10.24	3	0	*	.	.	.	.
10.72	0	0					
11.20	1	0					
11.68	3	0	*				
12.16	9	0	**				
12.64	4	0	*				
13.12	15	1	****				
13.60	26	1	*****				
14.08	24	1	*****				
14.56	44	2	*****				
15.04	62	2	*****				
15.52	46	2	*****				
16.00	71	2	*****				
16.48	77	3	*****				
16.96	72	3	*****				
17.44	99	3	*****				
17.92	127	4	*****				
18.40	115	4	*****				
18.88	83	3	*****				
19.36	117	4	*****				
19.84	135	5	*****				
20.32	99	3	*****				
20.80	149	5	*****				
21.28	144	5	*****				
21.76	145	5	*****				
22.24	128	4	*****				
22.72	115	4	*****				
23.20	97	3	*****				
23.68	81	3	*****				
24.16	76	3	*****				
24.64	67	2	*****				
25.12	58	2	*****				
25.60	87	3	*****				
26.08	94	3	*****				
26.56	180	6	*****				
27.04	132	5	*****				
27.52	28	1	*****				
28.00	9	0	**				
28.48	0	0					
28.96	0	0					

NO. OF SAMPLES OVER 29.20 = 0

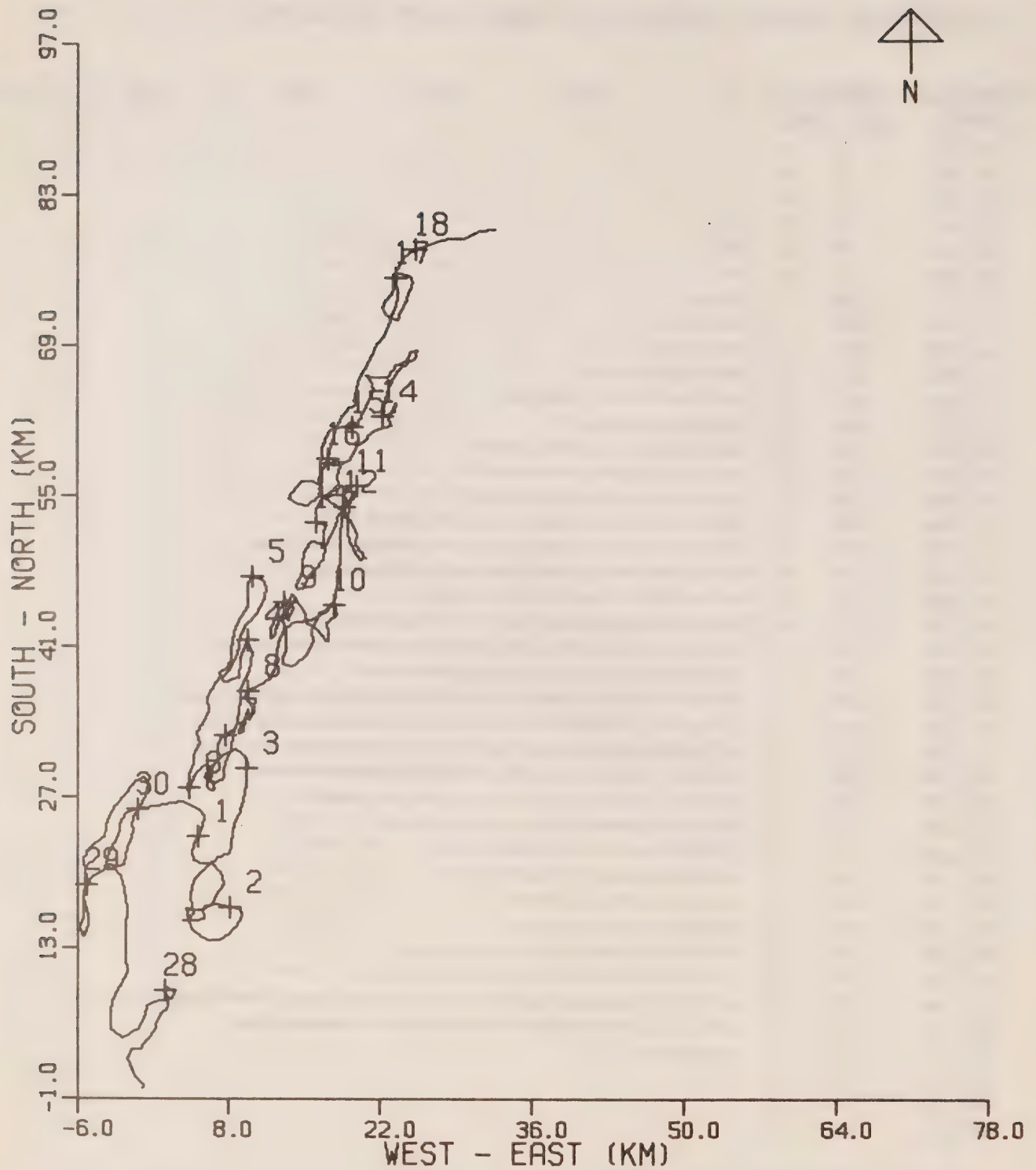
NO. OF SAMPLES UNDER 10.00 = 30

TOTAL NO. OF OBSERVATIONS = 2852

SAMPLE INTERVAL = 10 MINUTES

CC2 RELEASED.





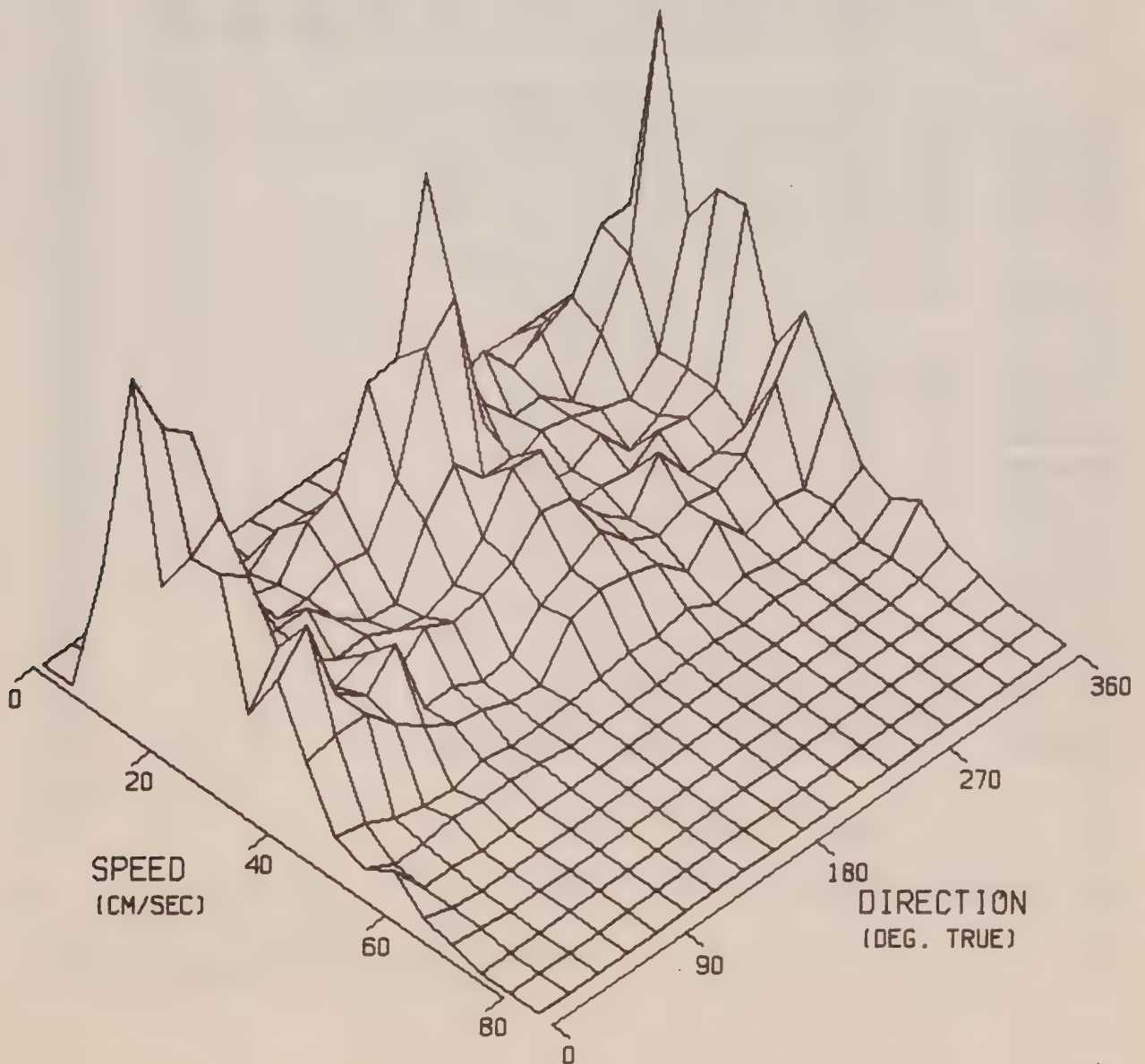
STN. NO. HS-5N

DEPTH 5 M.

STARTING DATE: 27/ 6/73      ENDING DATE: 18/ 7/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.  
STARTING DATE: 27/ 6/73  
NO. OF SAMPLES = 3000



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 27/ 6/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	001	078	048	109	044	036	008	011	004				339
15- 29	001	074	055	065	050	042	007	001	001				296
30- 44	001	062	070	030	035	032	003	001					234
45- 59	001	049	025	023	024	021	001	001					145
60- 74	001	019	024	017	019	025	001	003					109
75- 89	001	010	015	018	025	015	001						85
90-104	002	011	010	017	006	010	003	001					60
105-119	003	019	020	011	017	005	001						76
120-134		016	012	010	010	003							51
135-149	002	012	021	005	008	001							49
150-164	002	029	031	010	010	002	001						85
165-179	003	038	049	023	017	005	001						136
180-194	002	042	076	028	019	016	001						184
195-209	002	075	069	035	028	015	002						226
210-224	001	039	032	032	029	019	001						153
225-239		029	014	023	016	016	005						103
240-254	001	022	011	008	011	008	001						62
255-269		025	014	011	012	003							65
270-284		018	011	008	014	010	002						63
285-299		014	010	018	014	009		001					66
300-314	001	014	007	006	011	006							45
315-329	011	029	008	010	009	008							75
330-344	002	035	012	011	011	011	001						83
345-359		074	043	030	030	021	005	006	001				210
	38	687		469		45		6		0			3000
	833		558		339		25		0		0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 27/06/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	60	120	180	240	300
9	0	0	.	.	.	.	.
27	1	0					
45	0	0					
63	24	1	*****				
81	72	2	*****				
99	120	4	*****				
117	219	7	*****				
135	220	7	*****				
153	215	7	*****				
171	219	7	*****				
189	153	5	*****				
207	161	5	*****				
225	122	4	*****				
243	122	4	*****				
261	142	5	*****				
279	113	4	*****				
297	117	4	*****				
315	129	4	*****				
333	117	4	*****				
351	122	4	*****				
369	70	2	*****				
387	127	4	*****				
405	79	3	*****				
423	94	3	*****				
441	86	3	*****				
459	55	2	*****				
477	35	1	*****				
495	8	0	*				
513	11	0	**				
531	11	0	**				
549	5	0	*				
567	8	0	*				
585	7	0	*				
603	6	0	*				
621	4	0	*				
639	0	0					
657	2	0					
675	2	0					
693	2	0					
711	0	0					

NO. OF SAMPLES OVER 720 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 27/06/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	60	120	180	240	300
5	258	9	*****	*****	*****	*****	*****
15	200	7	*****	*****	*****	*****	*****
25	193	6	*****	*****	*****	*****	*****
35	155	5	*****	*****	*****	*****	*****
45	119	4	*****	*****	*****	*****	*****
55	97	3	*****	*****	*****	*****	*****
65	67	2	*****	*****	*****	*****	*****
75	65	2	*****	*****	*****	*****	*****
85	57	2	*****	*****	*****	*****	*****
95	34	1	*****	*****	*****	*****	*****
105	46	2	*****	*****	*****	*****	*****
115	57	2	*****	*****	*****	*****	*****
125	34	1	*****	*****	*****	*****	*****
135	31	1	*****	*****	*****	*****	*****
145	36	1	*****	*****	*****	*****	*****
155	54	2	*****	*****	*****	*****	*****
165	76	3	*****	*****	*****	*****	*****
175	95	3	*****	*****	*****	*****	*****
185	121	4	*****	*****	*****	*****	*****
195	142	5	*****	*****	*****	*****	*****
205	151	5	*****	*****	*****	*****	*****
215	97	3	*****	*****	*****	*****	*****
225	93	3	*****	*****	*****	*****	*****
235	54	2	*****	*****	*****	*****	*****
245	47	2	*****	*****	*****	*****	*****
255	35	1	*****	*****	*****	*****	*****
265	46	2	*****	*****	*****	*****	*****
275	49	2	*****	*****	*****	*****	*****
285	47	2	*****	*****	*****	*****	*****
295	35	1	*****	*****	*****	*****	*****
305	27	1	*****	*****	*****	*****	*****
315	43	1	*****	*****	*****	*****	*****
325	49	2	*****	*****	*****	*****	*****
335	52	2	*****	*****	*****	*****	*****
345	98	3	*****	*****	*****	*****	*****
355	140	5	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M, START DATE 27/06/73

MEDIAN (DEG.C)	FREQINCY NO.	PCT	40	80	120	160	200
9.89	12	0	***				
10.07	49	2	*****				
10.25	38	1	*****				
10.43	66	2	*****				
10.61	126	4	*****				
10.79	136	5	*****				
10.97	107	4	*****				
11.15	134	4	*****				
11.33	104	3	*****				
11.51	139	5	*****				
11.69	148	5	*****				
11.87	128	4	*****				
12.05	171	6	*****				
12.23	144	5	*****				
12.41	99	3	*****				
12.59	119	4	*****				
12.77	128	4	*****				
12.95	133	4	*****				
13.13	110	4	*****				
13.31	84	3	*****				
13.49	98	3	*****				
13.67	87	3	*****				
13.85	86	3	*****				
14.03	98	3	*****				
14.21	90	3	*****				
14.39	76	3	*****				
14.57	45	2	*****				
14.75	52	2	*****				
14.93	43	1	*****				
15.11	32	1	*****				
15.29	17	1	****				
15.47	20	1	*****				
15.65	15	1	****				
15.83	8	0	**				
16.01	1	0					
16.19	3	0	*				
16.37	12	0	***				
16.55	28	1	*****				
16.73	9	0	**				
16.91	2	0	*				

NO. OF SAMPLES OVER 17.00 = 3  
 NO. OF SAMPLES UNDER 9.80 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 27/06/73

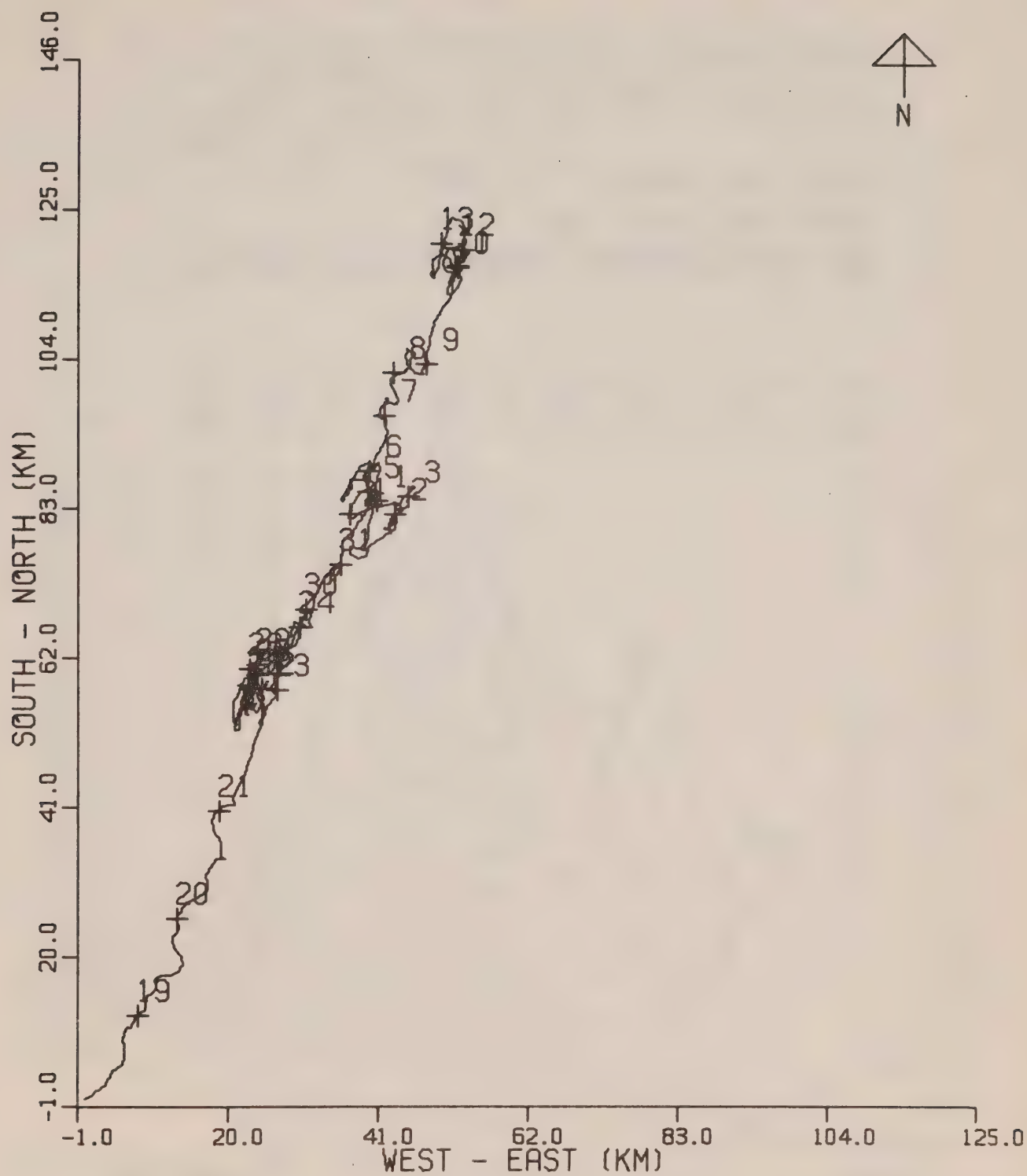
MEDIAN (PPT)	FREQNCY NO.	PCT	30	60	90	120	150
10.22	4	0	*				
10.66	6	0	**				
11.10	23	1	*****				
11.54	24	1	*****				
11.98	29	1	*****				
12.42	48	2	*****				
12.86	55	2	*****				
13.30	54	2	*****				
13.74	48	2	*****				
14.18	49	2	*****				
14.62	57	2	*****				
15.06	62	2	*****				
15.50	80	3	*****				
15.94	46	2	*****				
16.38	62	2	*****				
16.82	57	2	*****				
17.26	64	2	*****				
17.70	71	2	*****				
18.14	97	3	*****				
18.58	98	3	*****				
19.02	79	3	*****				
19.46	69	2	*****				
19.90	74	2	*****				
20.34	112	4	*****				
20.78	87	3	*****				
21.22	91	3	*****				
21.66	83	3	*****				
22.10	82	3	*****				
22.54	108	4	*****				
22.98	97	3	*****				
23.42	99	3	*****				
23.86	112	4	*****				
24.30	138	5	*****				
24.74	97	3	*****				
25.18	109	4	*****				
25.62	140	5	*****				
26.06	141	5	*****				
26.50	140	5	*****				
26.94	62	2	*****				
27.38	33	1	*****				

NO. OF SAMPLES OVER 27.60 = 0

NO. OF SAMPLES UNDER 10.00 = 13

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

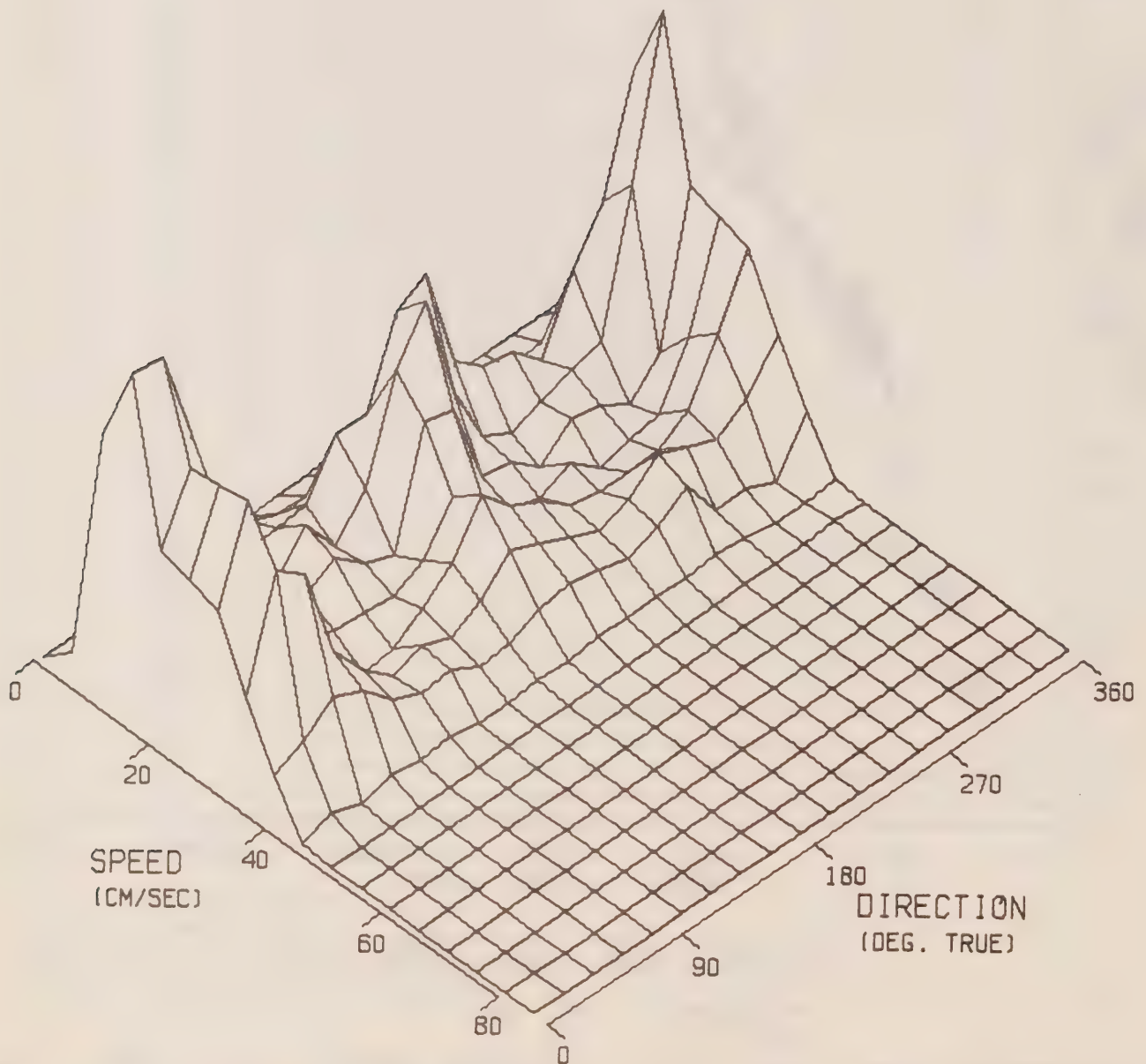
DEPTH 5 M.

STARTING DATE: 18/ 7/73      ENDING DATE: 13/ 8/73



# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.  
STARTING DATE: 18/ 7/73  
NO. OF SAMPLES = 3805



STN. NO. H3-5N DEPTH 5 M.

STARTING DATE: 18/ 7/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED													
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	008	135	102	105	052	012							414
15- 29	006	152	118	114	075	008							473
30- 44	011	133	074	068	072	008							366
45- 59	013	055	057	038	056	011							230
60- 74	010	033	026	024	023	006							122
75- 89	001	018	011	013	024	005							72
90-104	006	015	017	010	013	007							68
105-119	005	025	032	007	018	005							92
120-134	014	021	014	007	009	003							68
135-149	005	022	016	016	012	004							75
150-164	007	034	013	024	014	002							94
165-179	010	052	034	031	018	002							147
180-194	006	057	064	041	032	004							204
195-209	016	096	056	033	022	010							233
210-224	013	086	025	021	023	005							173
225-239	006	045	016	018	014	003							102
240-254	003	027	013	012	014	006							75
255-269	002	020	005	014	015	005							61
270-284	001	019	010	009	024	009							72
285-299	003	028	012	011	030	005							89
300-314	001	016	013	016	012	001							59
315-329	006	040	010	020	014	001							91
330-344	010	072	026	034	017		001						160
345-359	007	108	059	066	023	002							265
	170	823		626		1		0		0			3805
	1309		752		124			0		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 18/07/73

MEDIAN (MM/S)	FREQUENCY NO. PCT .	60 .	120 .	180 .	240 .	300 .
6	0 0					
18	0 0					
30	1 0					
42	14 0	**				
54	35 1	*****				
66	89 2	*****				
78	77 2	*****				
90	185 5	*****				
102	203 5	*****				
114	241 6	*****				
126	199 5	*****				
138	193 5	*****				
150	180 5	*****				
162	179 5	*****				
174	154 4	*****				
186	131 3	*****				
198	124 3	*****				
210	117 3	*****				
222	112 3	*****				
234	98 3	*****				
246	81 2	*****				
258	110 3	*****				
270	97 3	*****				
282	108 3	*****				
294	113 3	*****				
306	126 3	*****				
318	113 3	*****				
330	140 4	*****				
342	128 3	*****				
354	90 2	*****				
366	91 2	*****				
378	83 2	*****				
390	68 2	*****				
402	41 1	*****				
414	33 1	*****				
426	25 1	****				
438	11 0	**				
450	8 0	*				
462	5 0	*				
474	1 0					

NO. OF SAMPLES OVER 480 = 1  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3805  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 18/07/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT. %	70	140	210	280	350
5	298	8	*****	*****	*****	*****	*****
15	295	8	*****	*****	*****	*****	*****
25	318	8	*****	*****	*****	*****	*****
35	255	7	*****	*****	*****	*****	*****
45	190	5	*****	*****	*****	*****	*****
55	136	4	*****	*****	*****	*****	*****
65	80	2	*****	*****	*****	*****	*****
75	64	2	*****	*****	*****	*****	*****
85	49	1	*****	*****	*****	*****	*****
95	47	1	*****	*****	*****	*****	*****
105	42	1	*****	*****	*****	*****	*****
115	66	2	*****	*****	*****	*****	*****
125	54	1	*****	*****	*****	*****	*****
135	33	1	*****	*****	*****	*****	*****
145	56	1	*****	*****	*****	*****	*****
155	71	2	*****	*****	*****	*****	*****
165	66	2	*****	*****	*****	*****	*****
175	113	3	*****	*****	*****	*****	*****
185	147	4	*****	*****	*****	*****	*****
195	134	4	*****	*****	*****	*****	*****
205	158	4	*****	*****	*****	*****	*****
215	108	3	*****	*****	*****	*****	*****
225	91	2	*****	*****	*****	*****	*****
235	70	2	*****	*****	*****	*****	*****
245	40	1	*****	*****	*****	*****	*****
255	59	2	*****	*****	*****	*****	*****
265	33	1	*****	*****	*****	*****	*****
275	43	1	*****	*****	*****	*****	*****
285	69	2	*****	*****	*****	*****	*****
295	47	1	*****	*****	*****	*****	*****
305	41	1	*****	*****	*****	*****	*****
315	47	1	*****	*****	*****	*****	*****
325	68	2	*****	*****	*****	*****	*****
335	87	2	*****	*****	*****	*****	*****
345	151	4	*****	*****	*****	*****	*****
355	179	5	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3805  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 18/07/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	50	100	150	200	250
11.29	1	0	.	.	.	.	.
11.47	22	1	*****				
11.65	25	1	*****				
11.83	90	2	*****				
12.01	65	2	*****				
12.19	63	2	*****				
12.37	55	1	*****				
12.55	85	2	*****				
12.73	169	4	*****				
12.91	213	6	*****				
13.09	121	3	*****				
13.27	159	4	*****				
13.45	162	4	*****				
13.63	251	7	*****				
13.81	158	4	*****				
13.99	194	5	*****				
14.17	168	4	*****				
14.35	139	4	*****				
14.53	141	4	*****				
14.71	104	3	*****				
14.89	138	4	*****				
15.07	94	2	*****				
15.25	109	3	*****				
15.43	146	4	*****				
15.61	130	3	*****				
15.79	148	4	*****				
15.97	121	3	*****				
16.15	97	3	*****				
16.33	64	2	*****				
16.51	49	1	*****				
16.69	33	1	*****				
16.87	31	1	*****				
17.05	25	1	*****				
17.23	38	1	*****				
17.41	70	2	*****				
17.59	34	1	*****				
17.77	24	1	*****				
17.95	31	1	*****				
18.13	20	1	****				
18.31	5	0	*				

NO. OF SAMPLES OVER 18.40 = 13

NO. OF SAMPLES UNDER 11.20 = 0

TOTAL NO. OF OBSERVATIONS = 3805

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 18/07/73

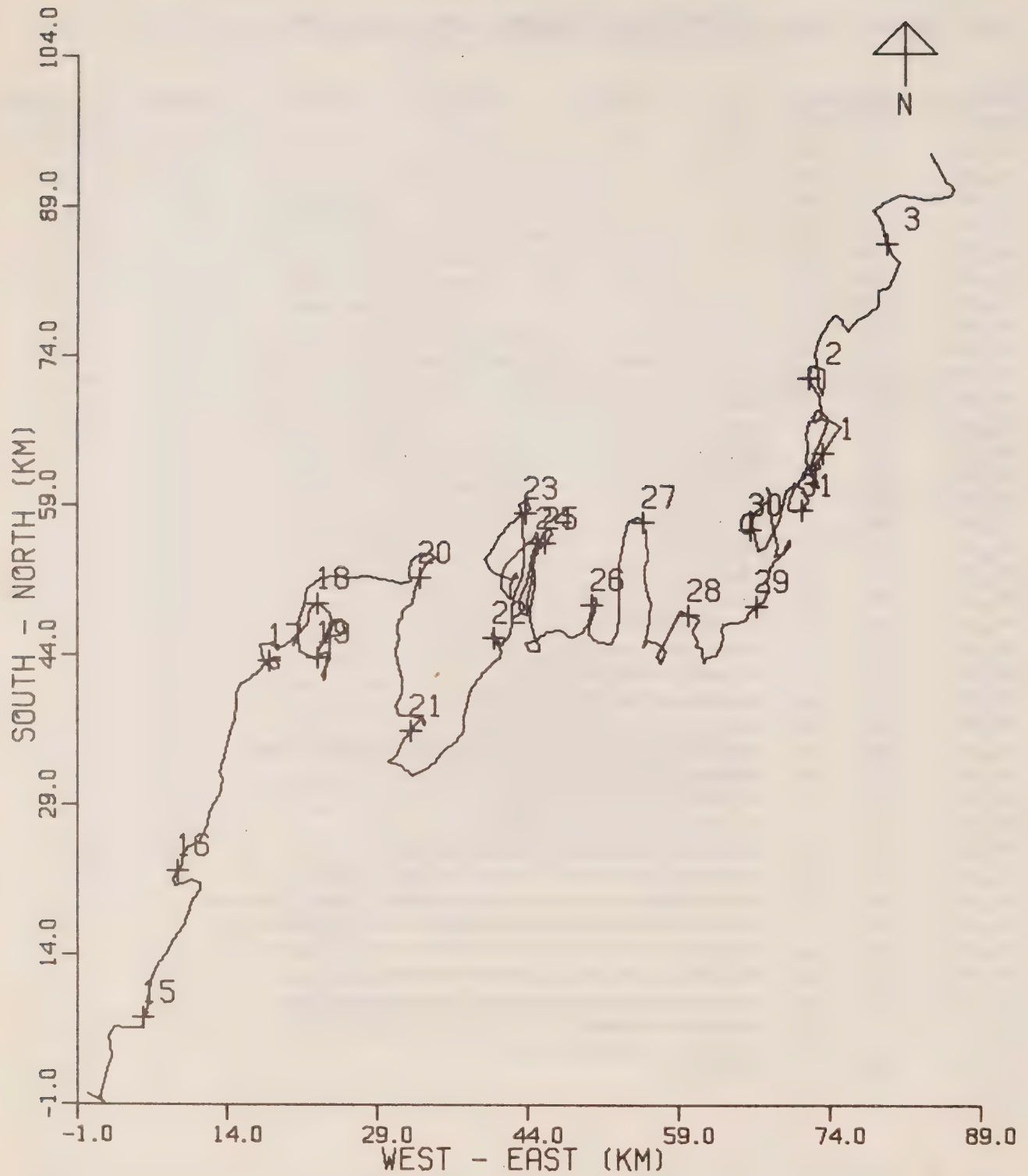
MEDIAN (PPT)	FREQUENCY NO.	PCT	70	140	210	280	350
10.82	2	0	.	.	.	.	.
11.26	3	0					
11.70	6	0	*				
12.14	8	0	*				
12.58	4	0	*				
13.02	6	0	*				
13.46	2	0					
13.90	8	0	*				
14.34	6	0	*				
14.78	11	0	**				
15.22	22	1	***				
15.66	26	1	****				
16.10	35	1	*****				
16.54	54	1	*****				
16.98	60	2	*****				
17.42	57	1	*****				
17.86	56	1	*****				
18.30	69	2	*****				
18.74	84	2	*****				
19.18	86	2	*****				
19.62	100	3	*****				
20.06	118	3	*****				
20.50	148	4	*****				
20.94	141	4	*****				
21.38	236	6	*****				
21.82	178	5	*****				
22.26	152	4	*****				
22.70	144	4	*****				
23.14	174	5	*****				
23.58	210	6	*****				
24.02	268	7	*****				
24.46	251	7	*****				
24.90	238	6	*****				
25.34	210	6	*****				
25.78	229	6	*****				
26.22	224	6	*****				
26.66	131	3	*****				
27.10	48	1	*****				
27.54	0	0					
27.98	0	0					

NO. OF SAMPLES OVER 28.20 = 0

NO. OF SAMPLES UNDER 10.60 = 0

TOTAL NO. OF OBSERVATIONS = 3805

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 5 M.

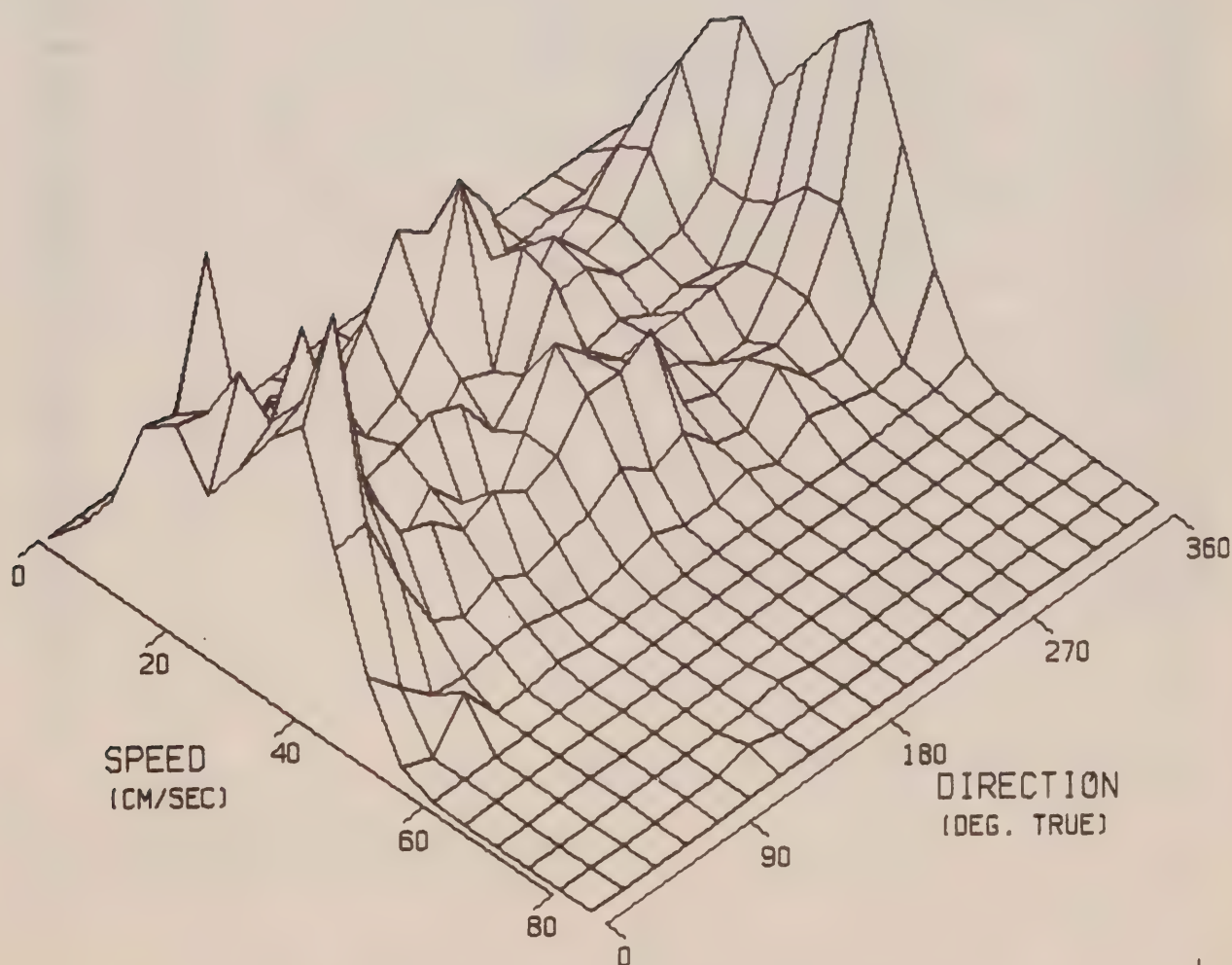
STARTING DATE: 14/ 8/73      ENDING DATE: 3/ 9/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 14/ 8/73

NO. OF SAMPLES = 2908





STN. NO. H9-5N DEPTH 5 M.

STARTING DATE: 14/ 8/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	006	034	037	057	089	061	014	001					299
15- 29	001	021	054	063	066	069	005						279
30- 44	002	054	054	053	050	038	007	003					261
45- 59	003	039	025	053	038	020	003	002					183
60- 74	001	015	026	014	034	015	002						107
75- 89		022	010	019	016	010	002						79
90-104	001	022	025	015	021	015	005						104
105-119		016	016	022	019	016				001			90
120-134		016	018	035	011	008	002			001			91
135-149	004	021	012	015	010	011							73
150-164	002	034	024	018	018	014	001			001			112
165-179		022	059	018	027	017	002						145
180-194	006	038	039	027	030	016	002						158
195-209		033	046	039	032	013	001						164
210-224	003	027	020	016	025	021	001						113
225-239	003	021	017	013	013	010	002						79
240-254	001	009	012	008	008	004	001						43
255-269	002	012	013	008	010	003							48
270-284	001	005	009	006	005	012	004						42
285-299	001	009	005	005	003	011	001						35
300-314		010	008	010	006	005	002						41
315-329	002	022	011	010	016	005		001					67
330-344	003	030	014	017	022	011	001						98
345-359	004	035	039	035	039	037	008						197
	46		593		608		66		0		2		2908
	567			576		442		7		1		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 14/08/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	40	80	120	160	200
8	0	0	.	.	.	.	.
24	2	0	*				
40	6	0	**				
56	9	0	**				
72	29	1	*****				
88	73	3	*****				
104	87	3	*****				
120	111	4	*****				
136	136	5	*****				
152	160	6	*****				
168	137	5	*****				
184	147	5	*****				
200	109	4	*****				
216	113	4	*****				
232	116	4	*****				
248	64	2	*****				
264	83	3	*****				
280	121	4	*****				
296	139	5	*****				
312	140	5	*****				
328	131	5	*****				
344	123	4	*****				
360	121	4	*****				
376	135	5	*****				
392	134	5	*****				
408	102	4	*****				
424	112	4	*****				
440	91	3	*****				
456	63	2	*****				
472	38	1	*****				
488	35	1	*****				
504	16	1	****				
520	8	0	**				
536	3	0	*				
552	8	0	**				
568	3	0	*				
584	0	0					
600	0	0					
616	0	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2908  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 14/08/73

MEDIAN (DEG.T)	FREQUENCY NO. PCT	50	100	150	200	250
5	222 8	*****	*****	*****	*****	*****
15	196 7	*****	*****	*****	*****	*****
25	174 6	*****	*****	*****	*****	*****
35	189 6	*****	*****	*****	*****	*****
45	156 5	*****	*****	*****	*****	*****
55	96 3	*****	*****	*****	*****	*****
65	71 2	*****	*****	*****	*****	*****
75	68 2	*****	*****	*****	*****	*****
85	44 2	*****	*****	*****	*****	*****
95	75 3	*****	*****	*****	*****	*****
105	58 2	*****	*****	*****	*****	*****
115	56 2	*****	*****	*****	*****	*****
125	57 2	*****	*****	*****	*****	*****
135	62 2	*****	*****	*****	*****	*****
145	51 2	*****	*****	*****	*****	*****
155	70 2	*****	*****	*****	*****	*****
165	81 3	*****	*****	*****	*****	*****
175	117 4	*****	*****	*****	*****	*****
185	96 3	*****	*****	*****	*****	*****
195	118 4	*****	*****	*****	*****	*****
205	94 3	*****	*****	*****	*****	*****
215	78 3	*****	*****	*****	*****	*****
225	64 2	*****	*****	*****	*****	*****
235	47 2	*****	*****	*****	*****	*****
245	23 1	*****	*****	*****	*****	*****
255	38 1	*****	*****	*****	*****	*****
265	28 1	*****	*****	*****	*****	*****
275	28 1	*****	*****	*****	*****	*****
285	26 1	*****	*****	*****	*****	*****
295	25 1	*****	*****	*****	*****	*****
305	26 1	*****	*****	*****	*****	*****
315	34 1	*****	*****	*****	*****	*****
325	47 2	*****	*****	*****	*****	*****
335	65 2	*****	*****	*****	*****	*****
345	101 3	*****	*****	*****	*****	*****
355	127 4	*****	*****	*****	*****	*****
365	0 0					
375	0 0					
385	0 0					
395	0 0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2908  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 14/08/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	30	60	90	120	150
11.28	7	0	..	.	.	.	.
11.44	8	0	...				
11.60	25	1	*****				
11.76	39	1	*****				
11.92	62	2	*****				
12.08	83	3	*****				
12.24	63	2	*****				
12.40	29	1	*****				
12.56	64	2	*****				
12.72	68	2	*****				
12.88	68	2	*****				
13.04	73	3	*****				
13.20	74	3	*****				
13.36	112	4	*****				
13.52	127	4	*****				
13.68	119	4	*****				
13.84	94	3	*****				
14.00	96	3	*****				
14.16	90	3	*****				
14.32	78	3	*****				
14.48	122	4	*****				
14.64	129	4	*****				
14.80	77	3	*****				
14.96	118	4	*****				
15.12	78	3	*****				
15.28	75	3	*****				
15.44	77	3	*****				
15.60	110	4	*****				
15.76	78	3	*****				
15.92	107	4	*****				
16.08	70	2	*****				
16.24	100	3	*****				
16.40	70	2	*****				
16.56	78	3	*****				
16.72	31	1	*****				
16.88	56	2	*****				
17.04	42	1	*****				
17.20	68	2	*****				
17.36	27	1	*****				
17.52	8	0	...				

NO. OF SAMPLES OVER 17.60 = 8

NO. OF SAMPLES UNDER 11.20 = 0

TOTAL NO. OF OBSERVATIONS = 2908

SAMPLE INTERVAL = 10 MINUTES

4 RELEASED.



## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 14/08/73

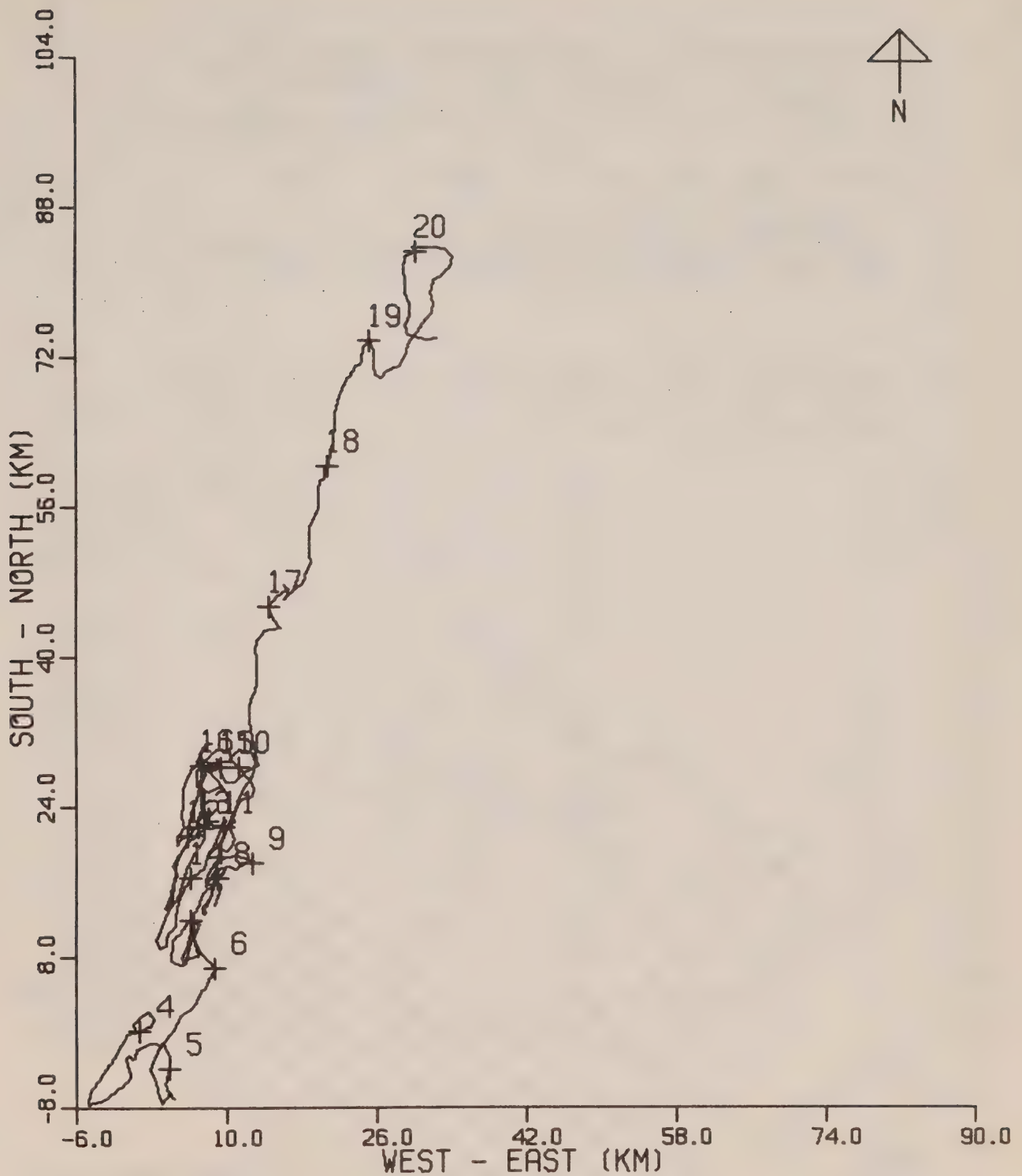
MEDIAN (PPT)	FREQUENCY NO. PCT	50	100	150	200	250
12.30	1 0	.	.	.	.	.
12.70	8 0 **					
13.10	9 0 **					
13.50	6 0 *					
13.90	4 0 *					
14.30	8 0 **					
14.70	8 0 **					
15.10	14 0 ***					
15.50	4 0 *					
15.90	5 0 *					
16.30	6 0 *					
16.70	13 0 ***					
17.10	23 1 *****					
17.50	25 1 *****					
17.90	40 1 *****					
18.30	70 2 *****					
18.70	73 3 *****					
19.10	94 3 *****					
19.50	68 2 *****					
19.90	78 3 *****					
20.30	103 4 *****					
20.70	95 3 *****					
21.10	89 3 *****					
21.50	104 4 *****					
21.90	92 3 *****					
22.30	112 4 *****					
22.70	165 6 *****					
23.10	141 5 *****					
23.50	135 5 *****					
23.90	129 4 *****					
24.30	127 4 *****					
24.70	154 5 *****					
25.10	194 7 *****					
25.50	138 5 *****					
25.90	121 4 *****					
26.30	102 4 *****					
26.70	112 4 *****					
27.10	126 4 *****					
27.50	110 4 *****					
27.90	1 0					

NO. OF SAMPLES OVER 28.10 = 0

NO. OF SAMPLES UNDER 12.10 = 1

TOTAL NO. OF OBSERVATIONS = 2908

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 5 M.

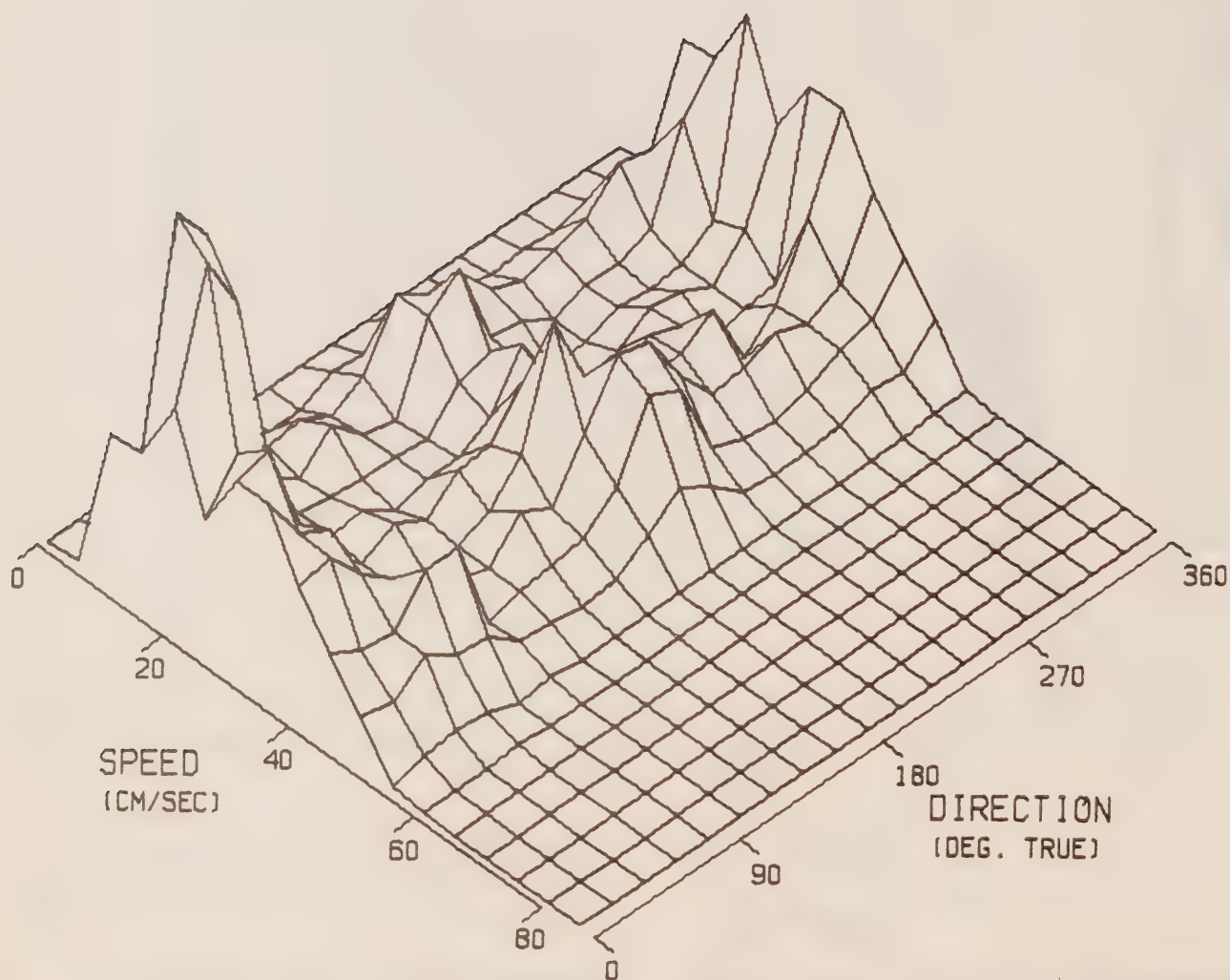
STARTING DATE: 3/ 9/73      ENDING DATE: 20/ 9/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 3/ 9/73

NO. OF SAMPLES = 2426



STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 3/ 9/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	005	058	066	067	057	035	008						296
15- 29	002	065	083	052	033	019	008						262
30- 44		047	071	047	035	025	011						236
45- 59		036	046	021	026	033	012						174
60- 74	001	019	012	007	010	020	009	001					79
75- 89		013	009	011	007	024	007						71
90-104	003	010	005	012	006	005	003						44
105-119	003	016	005	011	005	007	001						48
120-134		005	005	004	010	004	003						31
135-149		007	006	012	010	013							48
150-164	004	005	005	010	013	008	003						48
165-179	003	021	004	022	033	013	001						97
180-194	003	030	020	017	040	023	011						144
195-209	004	034	011	024	031	039	008						151
210-224	002	021	008	014	021	040	004						110
225-239	001	008	002	004	025	015	003						58
240-254	003	005	003	009	018	012	002						52
255-269	001	005	003	012	015	008	001						45
270-284	003	008	003	014	019	007	001						55
285-299	001	008	006	012	011	011	002						51
300-314	002	007	001	002	008	009							29
315-329	003	017	004	005	015	013	004						61
330-344	001	027	011	012	020	012	001						84
345-359	002	028	028	023	041	019	011						152
	47		417		509		114		0		0		2426
		500		424		414		1		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 03/09/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT.	30	60	90	120	150
8	0	0	.	.	.	.	.
24	0	0					
40	3	0	*				
56	15	1	*****				
72	29	1	*****				
88	49	2	*****				
104	83	3	*****				
120	117	5	*****				
136	123	5	*****				
152	128	5	*****				
168	88	4	*****				
184	92	4	*****				
200	109	4	*****				
216	91	4	*****				
232	51	2	*****				
248	63	3	*****				
264	85	4	*****				
280	84	3	*****				
296	80	3	*****				
312	98	4	*****				
328	93	4	*****				
344	120	5	*****				
360	108	4	*****				
376	117	5	*****				
392	93	4	*****				
408	73	3	*****				
424	82	3	*****				
440	76	3	*****				
456	91	4	*****				
472	70	3	*****				
488	52	2	*****				
504	44	2	*****				
520	7	0	**				
536	8	0	***				
552	3	0	*				
568	0	0					
584	0	0					
600	1	0					
616	0	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2426  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 03/09/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	208	9	*****				
15	182	8	*****				
25	192	8	*****				
35	149	6	*****				
45	148	6	*****				
55	93	4	*****				
65	60	2	*****				
75	42	2	*****				
85	47	2	*****				
95	32	1	*****				
105	27	1	*****				
115	31	1	*****				
125	21	1	****				
135	31	1	*****				
145	29	1	*****				
155	31	1	*****				
165	41	2	*****				
175	80	3	*****				
185	94	4	*****				
195	108	4	*****				
205	95	4	*****				
215	78	3	*****				
225	52	2	*****				
235	30	1	*****				
245	39	2	*****				
255	27	1	*****				
265	29	1	*****				
275	39	2	*****				
285	33	1	*****				
295	36	1	*****				
305	17	1	***				
315	28	1	*****				
325	48	2	*****				
335	49	2	*****				
345	79	3	*****				
355	101	4	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0

NO. OF SAMPLES UNDER 0 = 0

TOTAL NO. OF OBSERVATIONS = 2426

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M'. START DATE 03/09/73

MEDIAN (DEG.C)	FREQUNCY NO.	PCT .	40 .	80 .	120 .	160 .	200 .
10.27	0	0					
10.41	12	0	***				
10.55	37	2	*****				
10.69	58	2	*****				
10.83	52	2	*****				
10.97	65	3	*****				
11.11	75	3	*****				
11.25	94	4	*****				
11.39	95	4	*****				
11.53	95	4	*****				
11.67	134	6	*****				
11.81	127	5	*****				
11.95	112	5	*****				
12.09	140	6	*****				
12.23	100	4	*****				
12.37	78	3	*****				
12.51	88	4	*****				
12.65	72	3	*****				
12.79	86	4	*****				
12.93	94	4	*****				
13.07	73	3	*****				
13.21	77	3	*****				
13.35	83	3	*****				
13.49	56	2	*****				
13.63	73	3	*****				
13.77	75	3	*****				
13.91	93	4	*****				
14.05	80	3	*****				
14.19	46	2	*****				
14.33	23	1	*****				
14.47	16	1	****				
14.61	20	1	*****				
14.75	17	1	****				
14.89	25	1	*****				
15.03	16	1	****				
15.17	11	0	***				
15.31	6	0	**				
15.45	3	0	*				
15.59	7	0	**				
15.73	10	0	***				

NO. OF SAMPLES OVER 15.80 = 2

NO. OF SAMPLES UNDER 10.20 = 0

TOTAL NO. OF OBSERVATIONS = 2426

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 03/09/73

MEDIAN (PPT)	FREQUENCY NO.	PCT	60	120	180	240	300
15.57	0	0	.	.	.	.	.
15.91	5	0	*				
16.25	3	0	*				
16.59	0	0					
16.93	1	0					
17.27	0	0					
17.61	0	0					
17.95	1	0					
18.29	0	0					
18.63	4	0	*				
18.97	6	0	*				
19.31	10	0	**				
19.65	3	0	*				
19.99	1	0					
20.33	7	0	*				
20.67	4	0	*				
21.01	12	0	**				
21.35	9	0	**				
21.69	11	0	**				
22.03	22	1	*****				
22.37	26	1	*****				
22.71	52	2	*****				
23.05	50	2	*****				
23.39	103	4	*****				
23.73	104	4	*****				
24.07	145	6	*****				
24.41	162	7	*****				
24.75	164	7	*****				
25.09	213	9	*****				
25.43	169	7	*****				
25.77	129	5	*****				
26.11	103	4	*****				
26.45	109	4	*****				
26.79	164	7	*****				
27.13	138	6	*****				
27.47	197	8	*****				
27.81	133	5	*****				
28.15	123	5	*****				
28.49	43	2	*****				
28.83	0	0					

NO. OF SAMPLES OVER 29.00 = 0

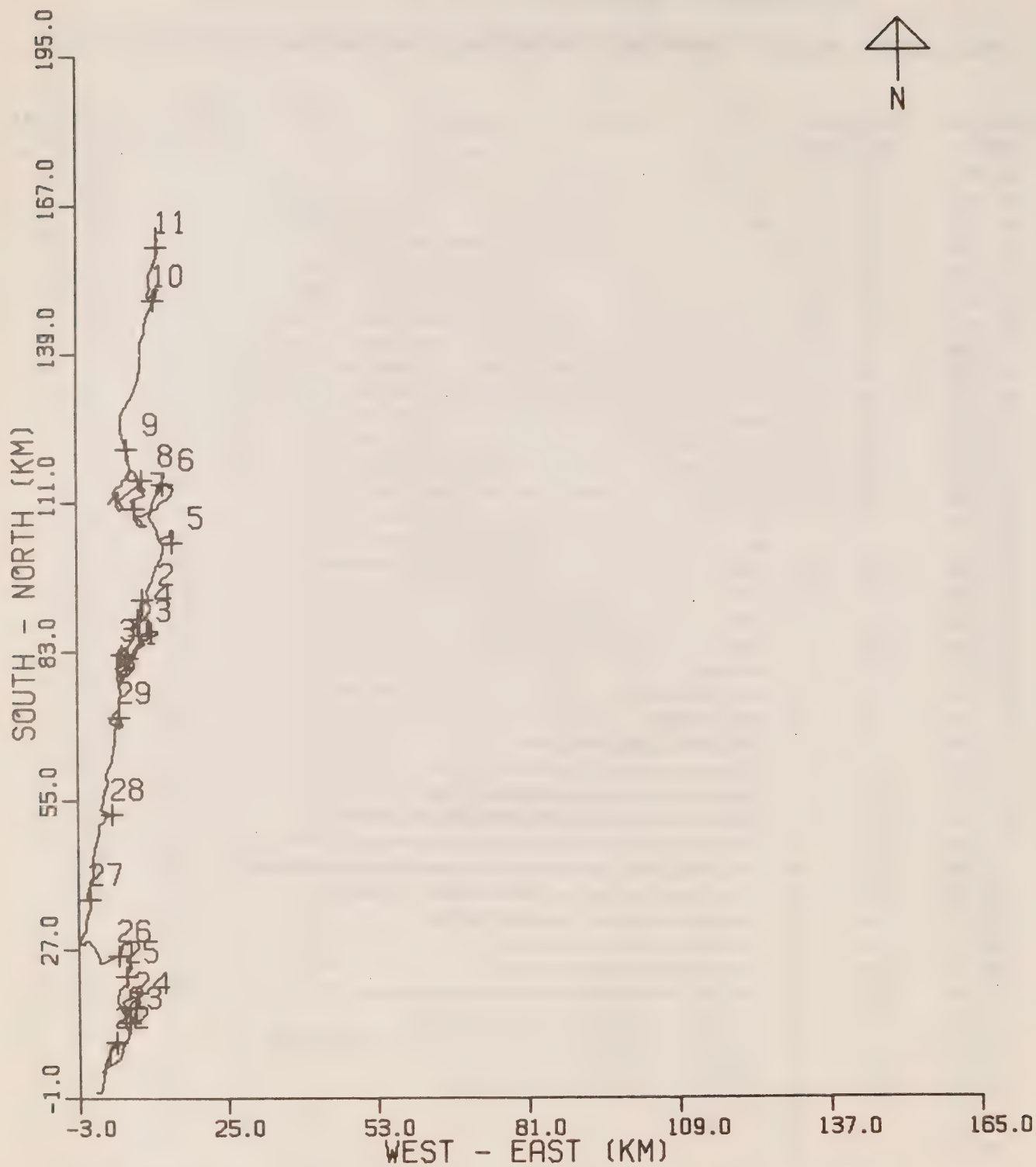
NO. OF SAMPLES UNDER 15.40 = 0

TOTAL NO. OF OBSERVATIONS = 2426

SAMPLE INTERVAL = 10 MINUTES

C3 RELEASED.





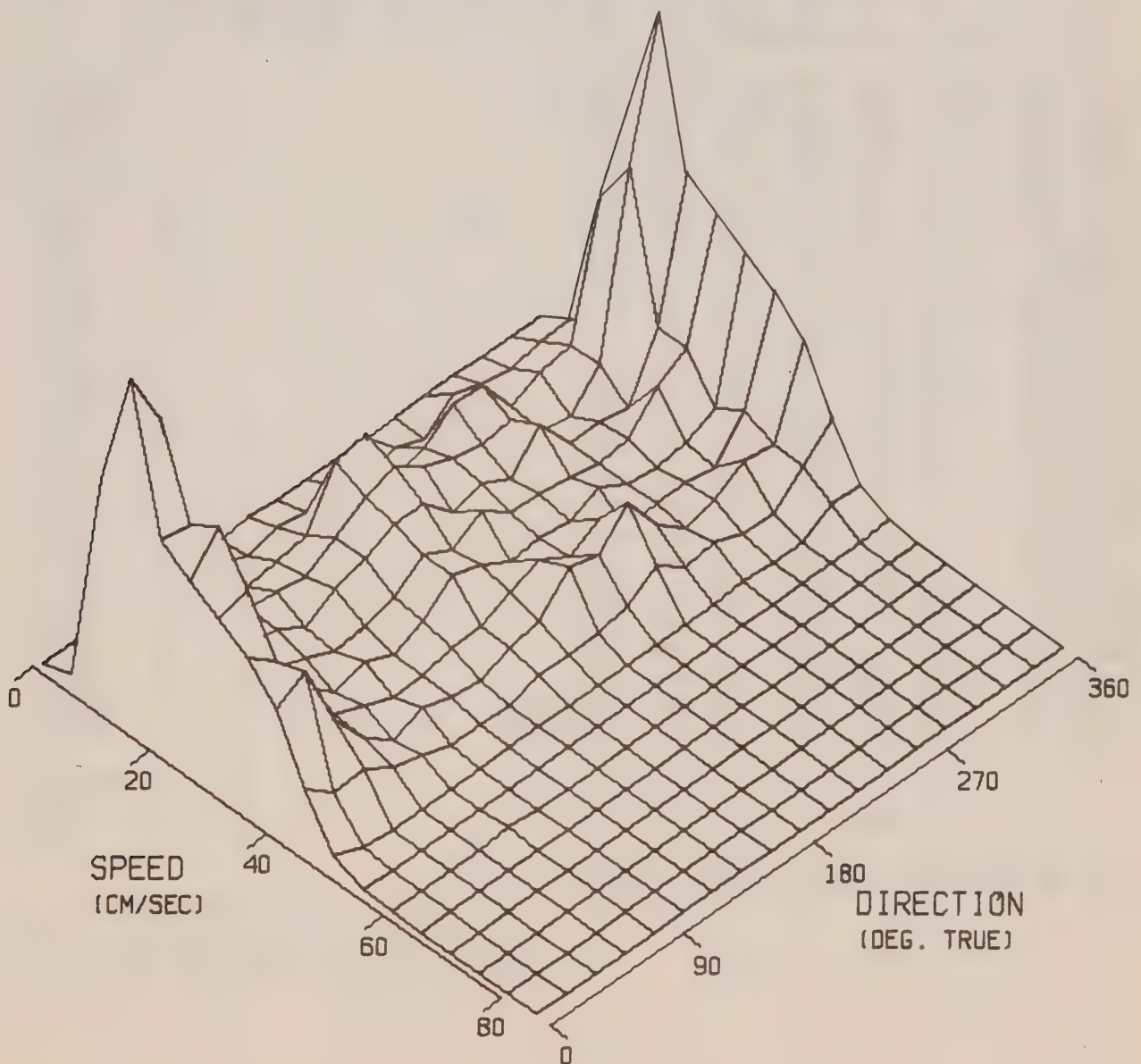
STN. NO. HS-5N

DEPTH 5 M.

STARTING DATE: 21/ 9/73      ENDING DATE: 11/10/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.  
STARTING DATE: 21/ 9/73  
NO. OF SAMPLES = 2878



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 21/ 9/73

SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED											
	000	080	160	240	320	400	480	560	640	720	800	880
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO
	079	159	239	319	399	479	559	639	719	799	879	959
0- 14	001	126	109	091	074	032	002					435
15- 29	003	087	103	086	063	031						373
30- 44	005	068	035	028	037	024						197
45- 59	005	036	030	019	026	010						126
60- 74	005	030	020	016	008	010						89
75- 89	005	009	010	010	009	003		001				47
90-104	004	012	004	006	006	005						37
105-119	004	007	011	008	004	003				001		38
120-134	002	019	013	009	004	001						48
135-149	005	015	021	012	007							60
150-164	003	034	014	017	005	003						76
165-179	003	053	030	026	011	009						132
180-194	003	025	020	020	013	006						87
195-209	001	014	020	014	021	013						83
210-224	005	016	018	010	017	007						73
225-239	001	015	005	015	020	021						77
240-254		034	017	013	024	014						102
255-269	010	017	017	016	006	012						78
270-284	006	001	005	013	007	009	001					42
285-299	005	007	006	006	006	005						35
300-314	003	008	006	017	009	007						50
315-329	007	012	010	012	010	008						59
330-344	004	067	034	016	011	010	004					146
345-359	010	144	073	050	052	027	008					364
	100	631		450		15		0	0	0		2854
		856		530		270		1	0	0	1	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 24

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 21/09/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	50	100	150	200	250
7	0 0	.	.	.	.	.
21	2 0					
35	11 0	**				
49	24 1	*****				
63	28 1	*****				
77	64 2	*****				
91	114 4	*****				
105	120 4	*****				
119	219 8	*****				
133	161 6	*****				
147	169 6	*****				
161	125 4	*****				
175	103 4	*****				
189	143 5	*****				
203	84 3	*****				
217	127 4	*****				
231	93 3	*****				
245	96 3	*****				
259	109 4	*****				
273	91 3	*****				
287	83 3	*****				
301	61 2	*****				
315	122 4	*****				
329	78 3	*****				
343	64 2	*****				
357	87 3	*****				
371	50 2	*****				
385	110 4	*****				
399	73 3	*****				
413	55 2	*****				
427	83 3	*****				
441	40 1	*****				
455	39 1	*****				
469	8 0	**				
483	5 0	*				
497	7 0	*				
511	1 0					
525	3 0	*				
539	0 0					
553	0 0					

NO. OF SAMPLES OVER 560 = 26  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2878  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 21/09/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	70	140	210	280	350
5	328	11	*****	*****	*****	*****	*****
15	283	10	*****	*****	*****	*****	*****
25	216	8	*****	*****	*****	*****	*****
35	128	4	*****	*****	*****	*****	*****
45	109	4	*****	*****	*****	*****	*****
55	82	3	*****	*****	*****	*****	*****
65	63	2	*****	*****	*****	*****	*****
75	36	1	*****	*****	*****	*****	*****
85	33	1	*****	*****	*****	*****	*****
95	23	1	*****	*****	*****	*****	*****
105	33	1	*****	*****	*****	*****	*****
115	20	1	*****	*****	*****	*****	*****
125	33	1	*****	*****	*****	*****	*****
135	41	1	*****	*****	*****	*****	*****
145	35	1	*****	*****	*****	*****	*****
155	40	1	*****	*****	*****	*****	*****
165	92	3	*****	*****	*****	*****	*****
175	81	3	*****	*****	*****	*****	*****
185	57	2	*****	*****	*****	*****	*****
195	50	2	*****	*****	*****	*****	*****
205	58	2	*****	*****	*****	*****	*****
215	55	2	*****	*****	*****	*****	*****
225	46	2	*****	*****	*****	*****	*****
235	57	2	*****	*****	*****	*****	*****
245	67	2	*****	*****	*****	*****	*****
255	68	2	*****	*****	*****	*****	*****
265	45	2	*****	*****	*****	*****	*****
275	27	1	*****	*****	*****	*****	*****
285	26	1	*****	*****	*****	*****	*****
295	21	1	*****	*****	*****	*****	*****
305	31	1	*****	*****	*****	*****	*****
315	37	1	*****	*****	*****	*****	*****
325	49	2	*****	*****	*****	*****	*****
335	79	3	*****	*****	*****	*****	*****
345	191	7	*****	*****	*****	*****	*****
355	238	8	*****	*****	*****	*****	*****
365	0	0	*****	*****	*****	*****	*****
375	0	0	*****	*****	*****	*****	*****
385	0	0	*****	*****	*****	*****	*****
395	0	0	*****	*****	*****	*****	*****

NO. OF SAMPLES OVER 400 = 0

NO. OF SAMPLES UNDER 0 = 0

TOTAL NO. OF OBSERVATIONS = 2878

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M. START DATE 21/09/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	60	120	180	240	300
10.65	16	1	***				
10.75	12	0	**				
10.85	34	1	*****				
10.95	28	1	*****				
11.05	18	1	***				
11.15	37	1	*****				
11.25	62	2	*****				
11.35	74	3	*****				
11.45	150	5	*****				
11.55	122	4	*****				
11.65	147	5	*****				
11.75	216	8	*****				
11.85	257	9	*****				
11.95	187	6	*****				
12.05	165	6	*****				
12.15	242	8	*****				
12.25	189	7	*****				
12.35	143	5	*****				
12.45	153	5	*****				
12.55	142	5	*****				
12.65	102	4	*****				
12.75	71	2	*****				
12.85	56	2	*****				
12.95	88	3	*****				
13.05	23	1	***				
13.15	17	1	**				
13.25	11	0	**				
13.35	17	1	***				
13.45	12	0	**				
13.55	12	0	**				
13.65	9	0	**				
13.75	6	0	*				
13.85	7	0	*				
13.95	10	0	**				
14.05	14	0	**				
14.15	12	0	**				
14.25	10	0	**				
14.35	1	0					
14.45	2	0					
14.55	1	0					

NO. OF SAMPLES OVER 14.60 = 0

NO. OF SAMPLES UNDER 10.60 = 3

TOTAL NO. OF OBSERVATIONS = 2878

SAMPLE INTERVAL = 10 MINUTES

RELEASED.

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 21/09/73

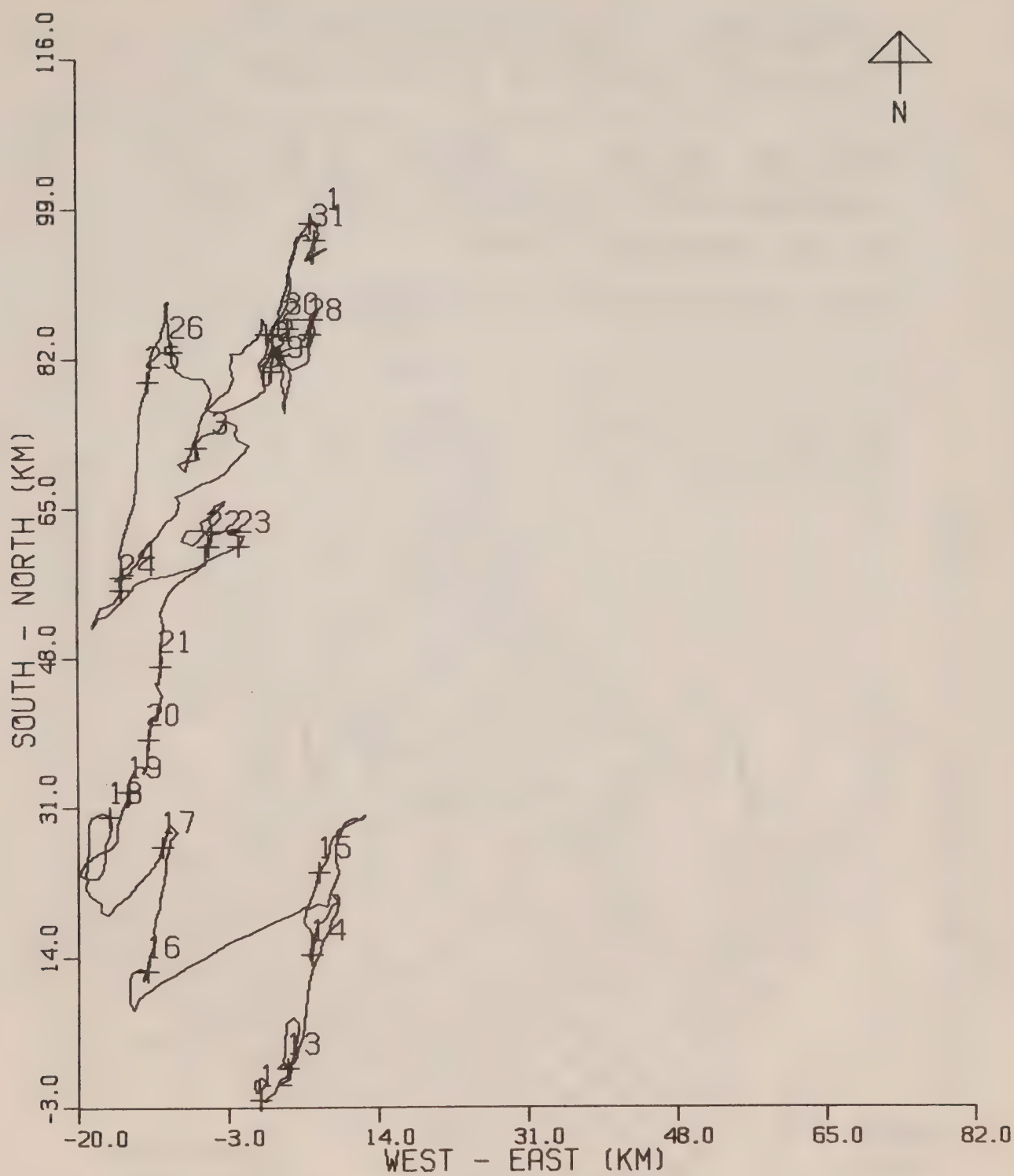
MEDIAN (PPT)	FREQUENCY NO. PCT	40	80	120	160	200
21.29	16 1	*****				
21.47	20 1	*****				
21.65	26 1	*****				
21.83	40 1	*****				
22.01	19 1	*****				
22.19	16 1	*****				
22.37	28 1	*****				
22.55	31 1	*****				
22.73	20 1	*****				
22.91	28 1	*****				
23.09	35 1	*****				
23.27	48 2	*****				
23.45	56 2	*****				
23.63	29 1	*****				
23.81	56 2	*****				
23.99	65 2	*****				
24.17	67 2	*****				
24.35	74 3	*****				
24.53	54 2	*****				
24.71	61 2	*****				
24.89	101 4	*****				
25.07	106 4	*****				
25.25	112 4	*****				
25.43	110 4	*****				
25.61	146 5	*****				
25.79	145 5	*****				
25.97	145 5	*****				
26.15	134 5	*****				
26.33	145 5	*****				
26.51	163 6	*****				
26.69	146 5	*****				
26.87	125 4	*****				
27.05	130 5	*****				
27.23	118 4	*****				
27.41	84 3	*****				
27.59	57 2	*****				
27.77	31 1	*****				
27.95	48 2	*****				
28.13	22 1	*****				
28.31	5 0					

NO. OF SAMPLES OVER 28.40 = 0

NO. OF SAMPLES UNDER 21.20 = 16

TOTAL NO. OF OBSERVATIONS = 2878

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

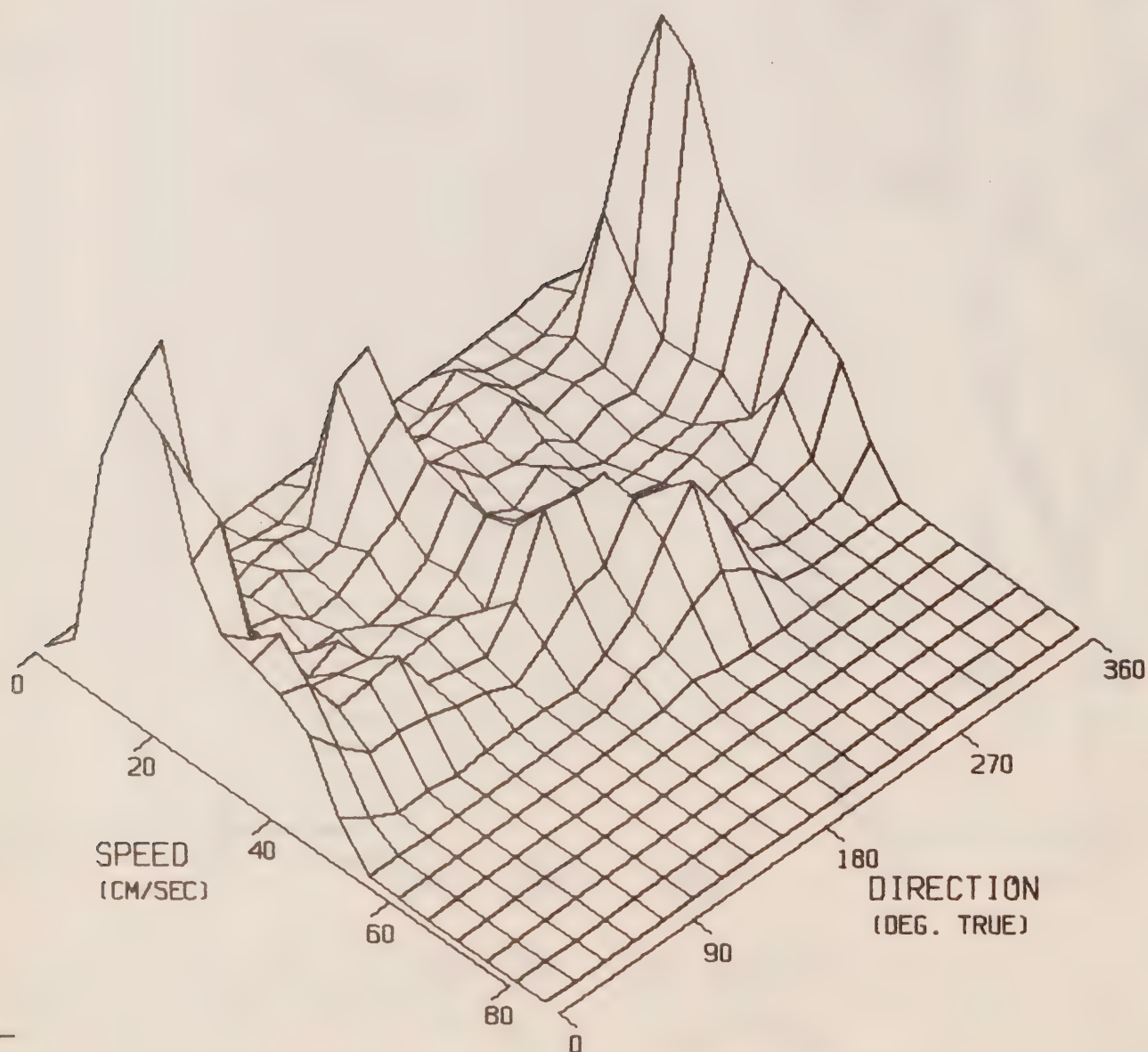
DEPTH 5 M.

STARTING DATE: 11/10/73    ENDING DATE: 4/11/73



# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.  
STARTING DATE: 11/10/73  
NO. OF SAMPLES = 3425



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 11/10/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	018	146	147	094	068	061	016						550
15- 29	006	139	112	069	057	030	005						418
30- 44	001	066	042	031	036	016							192
45- 59	003	033	016	017	030	018							117
60- 74	004	013	022	021	025	026	002						113
75- 89	003	008	014	014	023	026							88
90-104	004	012	009	005	008	014	001						53
105-119	002	007	006	010	011	011							47
120-134	004	009	006	005	015	007							46
135-149		010	013	006	012	004	001						46
150-164	005	046	018	007	006	010							92
165-179	010	090	043	040	036	034	001						254
180-194	002	030	035	022	036	033	013	004					175
195-209		016	016	016	049	030	012	005					144
210-224	001	016	021	011	031	036	025	002					143
225-239		010	007	008	029	066	045	009					174
240-254	006	017	014	016	016	024	037	004					134
255-269	009	015	010	007	009	024	029	001					104
270-284	004	004		002	009	005	008						32
285-299		003	006	005	011	004	001						30
300-314	003	006	002	002	011	006	001						31
315-329	001	010	004	008	016	010							49
330-344	010	027	009	018	008	017							89
345-359	019	098	074	042	037	032	002						304
	115	646		589		199		0	0	0			3425
	831		476		544		25		0		0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 11/10/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
8	0	0	.	.	.	.	.
24	19	1	*****				
40	11	0	**				
56	32	1	*****				
72	53	2	*****				
88	144	4	*****				
104	163	5	*****				
120	215	6	*****				
136	149	4	*****				
152	160	5	*****				
168	166	5	*****				
184	139	4	*****				
200	120	4	*****				
216	138	4	*****				
232	112	3	*****				
248	71	2	*****				
264	106	3	*****				
280	93	3	*****				
296	82	2	*****				
312	95	3	*****				
328	99	3	*****				
344	125	4	*****				
360	132	4	*****				
376	131	4	*****				
392	130	4	*****				
408	96	3	*****				
424	132	4	*****				
440	119	3	*****				
456	90	3	*****				
472	79	2	*****				
488	64	2	*****				
504	43	1	*****				
520	45	1	*****				
536	27	1	*****				
552	27	1	*****				
568	12	0	**				
584	4	0	*				
600	1	0					
616	1	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3425  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M. START DATE 11/10/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	90	180	270	360	450
5	404	12	*****				
15	356	10	*****				
25	225	7	*****				
35	144	4	*****				
45	83	2	*****				
55	72	2	*****				
65	75	2	*****				
75	67	2	*****				
85	57	2	*****				
95	37	1	****				
105	35	1	****				
115	29	1	***				
125	32	1	****				
135	25	1	***				
145	33	1	****				
155	53	2	*****				
165	118	3	*****				
175	183	5	*****				
185	120	4	*****				
195	104	3	*****				
205	95	3	*****				
215	93	3	*****				
225	108	3	*****				
235	113	3	*****				
245	95	3	*****				
255	78	2	*****				
265	60	2	*****				
275	24	1	***				
285	13	0	*				
295	24	1	***				
305	22	1	**				
315	29	1	***				
325	27	1	***				
335	61	2	*****				
345	124	4	*****				
355	207	6	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3425  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M, START DATE 11/10/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT .	120 .	240 .	360 .	480 .	600 .
7.56	3	0					
7.68	30	1	***				
7.80	59	2	*****				
7.92	54	1	*****				
8.04	93	2	*****				
8.16	67	2	*****				
8.28	72	2	*****				
8.40	67	2	*****				
8.52	61	2	*****				
8.64	55	1	*****				
8.76	21	1	**				
8.88	21	1	**				
9.00	5	0					
9.12	6	0	*				
9.24	16	0	*				
9.36	14	0	*				
9.48	43	1	****				
9.60	85	2	*****				
9.72	70	2	*****				
9.84	133	3	*****				
9.96	341	9	*****				
10.08	920	24	*****				*****?
10.20	121	3	*****				
10.32	127	3	*****				
10.44	139	4	*****				
10.56	321	8	*****				
10.68	259	7	*****				
10.80	120	3	*****				
10.92	40	1	***				
11.04	31	1	***				
11.16	95	2	*****				
11.28	82	2	*****				
11.40	36	1	***				
11.52	42	1	****				
11.64	16	0	*				
11.76	203	5	*****				
11.88	44	1	****				
12.00	0	0					
12.12	0	0					
12.24	0	0					

NO. OF SAMPLES OVER 12.30 = 0

NO. OF SAMPLES UNDER 7.50 = 0

TOTAL NO. OF OBSERVATIONS = 3912

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M. START DATE 11/10/73

MEDIAN (PPT)	FREQUENCY NO.	PCT	60	120	180	240	300
19.73	15	0	***				
19.99	15	0	***				
20.25	14	0	**				
20.51	11	0	**				
20.77	21	1	*****				
21.03	32	1	*****				
21.29	29	1	*****				
21.55	27	1	*****				
21.81	81	2	*****				
22.07	79	2	*****				
22.33	32	1	*****				
22.59	43	1	*****				
22.85	81	2	*****				
23.11	100	3	*****				
23.37	117	3	*****				
23.63	110	3	*****				
23.89	100	3	*****				
24.15	92	2	*****				
24.41	96	2	*****				
24.67	166	4	*****				
24.93	143	4	*****				
25.19	194	5	*****				
25.45	307	8	*****				
25.71	181	5	*****				
25.97	185	5	*****				
26.23	153	4	*****				
26.49	165	4	*****				
26.75	151	4	*****				
27.01	181	5	*****				
27.27	149	4	*****				
27.53	137	4	*****				
27.79	107	3	*****				
28.05	141	4	*****				
28.31	110	3	*****				
28.57	89	2	*****				
28.83	71	2	*****				
29.09	46	1	*****				
29.35	45	1	*****				
29.61	60	2	*****				
29.87	25	1	****				

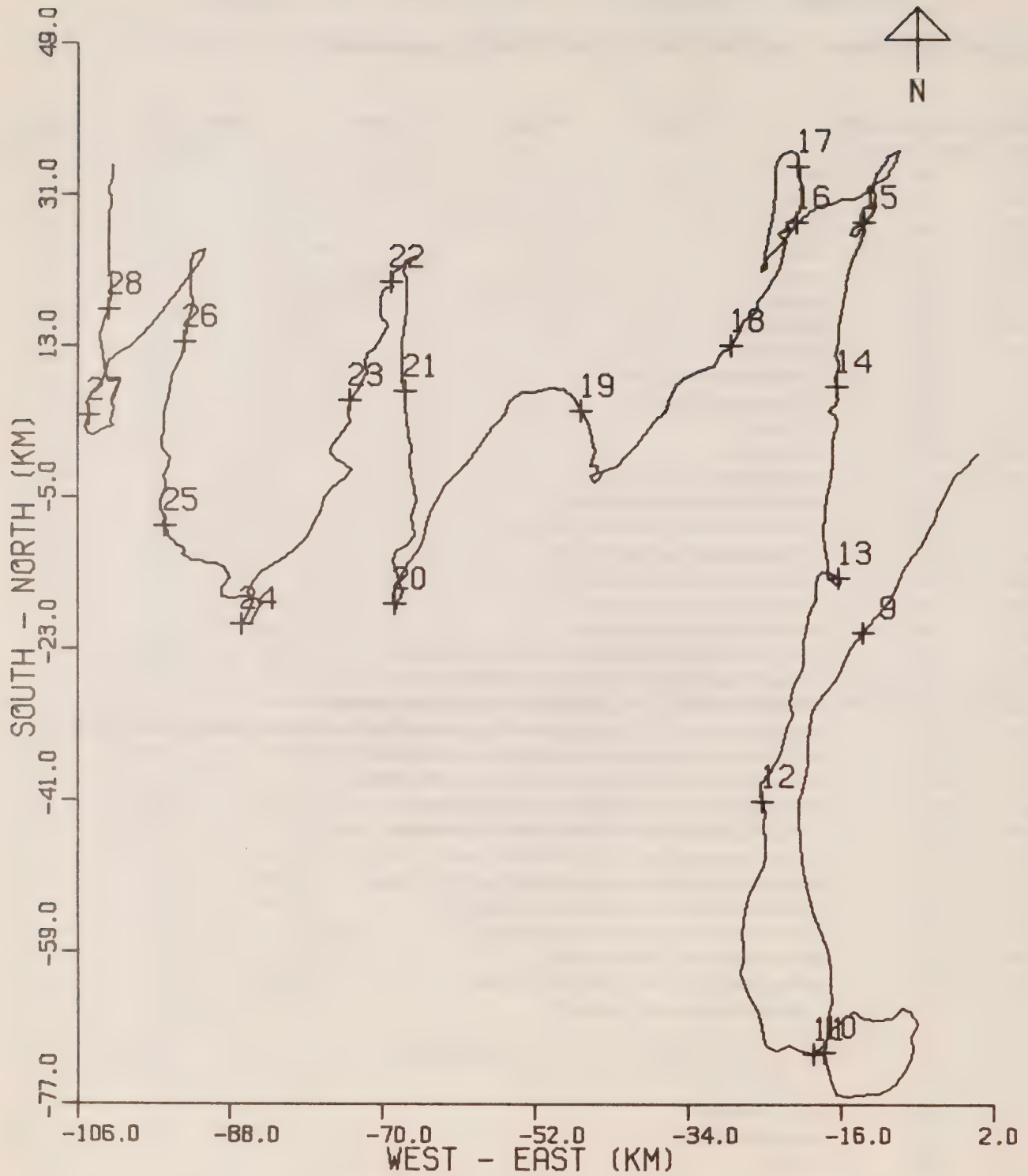
NO. OF SAMPLES OVER 30.00 = 0

NO. OF SAMPLES UNDER 19.60 = 11

TOTAL NO. OF OBSERVATIONS = 3912

SAMPLE INTERVAL = 10 MINUTES

RELEASED.



STN. NO. HS-5N

DEPTH 5 M.

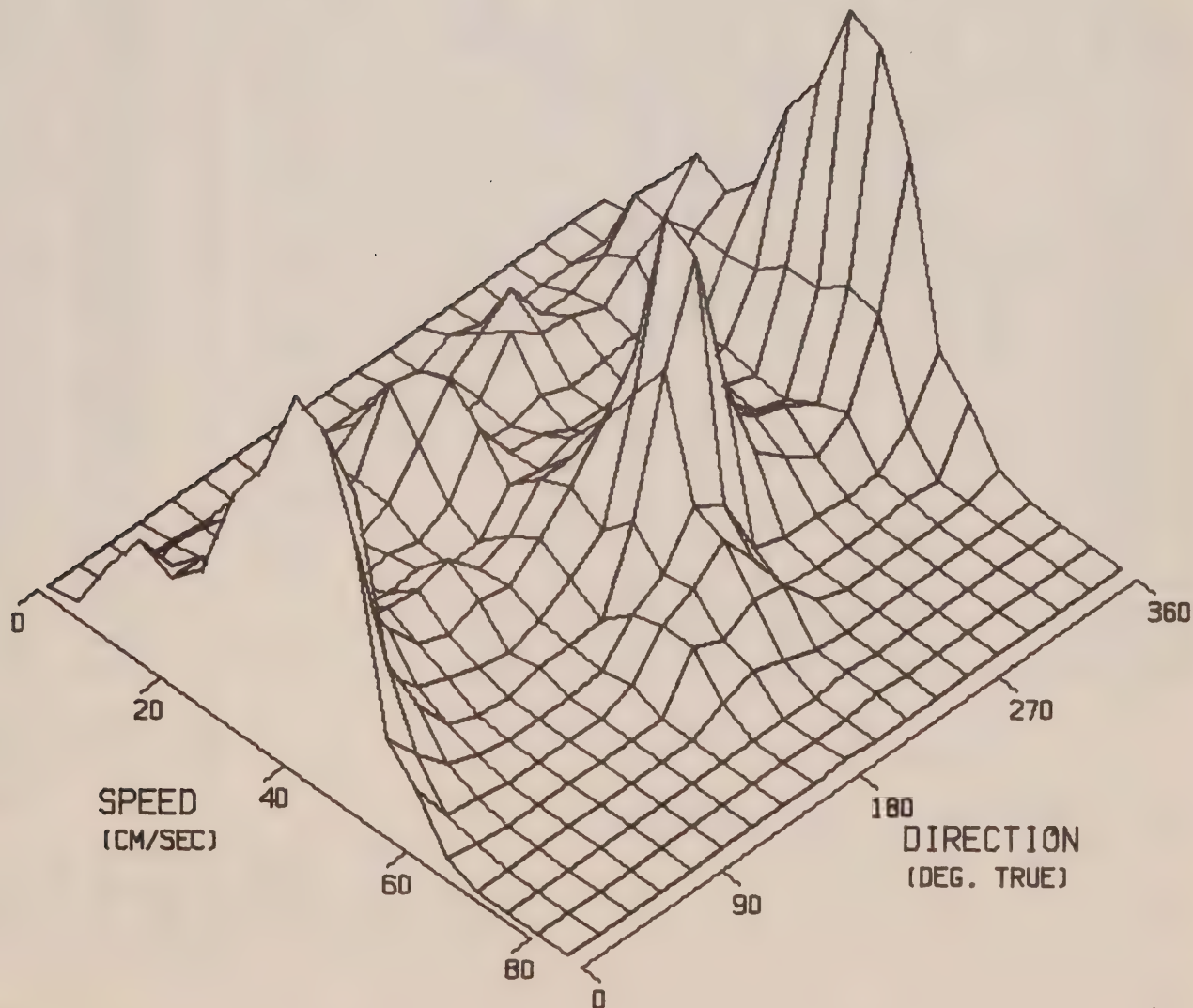
STARTING DATE: 8/11/73      ENDING DATE: 28/11/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 8/11/73

NO. OF SAMPLES = 2871





STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 8/11/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	004	018	034	062	107	102	060	023					410
15- 29	002	011	022	019	048	083	029	006					220
30- 44		016	006	015	024	029	016	003					109
45- 59	001	011	005	008	013	011	007						56
60- 74		014	014	005	019	016	002						70
75- 89		011	014	008	008	006	001						48
90-104		004	003	002	012	005							26
105-119		003	006	007	007	001							24
120-134		005	003	003	015	005	002						33
135-149		005	006		007	005	002	003					28
150-164	001	023	013	001	009	008	004	011	011				81
165-179	001	031	043	014	014	017	016	020	006				162
180-194	002	006	003	010	027	027	036	020	015		001		147
195-209	002	004	007	011	019	053	053	024	007				180
210-224		004	002	010	027	084	069	015	010	001	001		223
225-239	004	012	005	010	025	102	057	004	005				224
240-254	002	009	009	005	019	052	012		001				109
255-269	002	020	003	004	012	020	014						75
270-284		013	002	002	011	017	018						63
285-299		007	004	004	012	018	004						49
300-314		005	006	003	009	012	004						39
315-329		018	004	008	007	009	010	001					57
330-344		024	018	020	024	030	023	002					141
345-359	001	024	031	043	055	097	040	003					294
	22	263		530		479		55		2			2868
	298		274		809		135		1		0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 3

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M START DATE 08/11/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	50	100	150	200	250
11	0 0	.	.	.	.	.
33	1 0					
55	2 0					
77	36 1	*****				
99	69 2	*****				
121	91 3	*****				
143	108 4	*****				
165	72 3	*****				
187	74 3	*****				
209	89 3	*****				
231	54 2	*****				
253	57 2	*****				
275	63 2	*****				
297	82 3	*****				
319	93 3	*****				
341	167 6	*****				
363	146 5	*****				
385	183 6	*****				
407	187 7	*****				
429	176 6	*****				
451	262 9	*****				
473	224 8	*****				
495	198 7	*****				
517	152 5	*****				
539	73 3	*****				
561	40 1	*****				
583	35 1	*****				
605	43 1	*****				
627	33 1	*****				
649	24 1	*****				
671	15 1	***				
693	14 0	***				
715	2 0					
737	0 0					
759	1 0					
781	0 0					
803	1 0					
825	0 0					
847	0 0					
869	1 0					

NO. OF SAMPLES OVER 880 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2871  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M START DATE 08/11/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	70	140	210	280	350
5	327	11	*****	*****	*****	*****	*****
15	190	7	*****	*****	*****	*****	*****
25	125	4	*****	*****	*****	*****	*****
35	72	3	*****	*****	*****	*****	*****
45	49	2	*****	*****	*****	*****	*****
55	36	1	*****	*****	*****	*****	*****
65	48	2	*****	*****	*****	*****	*****
75	45	2	*****	*****	*****	*****	*****
85	24	1	***	*****	*****	*****	*****
95	17	1	**	*****	*****	*****	*****
105	19	1	***	*****	*****	*****	*****
115	13	0	**	*****	*****	*****	*****
125	26	1	***	*****	*****	*****	*****
135	15	1	**	*****	*****	*****	*****
145	20	1	***	*****	*****	*****	*****
155	50	2	*****	*****	*****	*****	*****
165	78	3	*****	*****	*****	*****	*****
175	120	4	*****	*****	*****	*****	*****
185	94	3	*****	*****	*****	*****	*****
195	111	4	*****	*****	*****	*****	*****
205	138	5	*****	*****	*****	*****	*****
215	139	5	*****	*****	*****	*****	*****
225	172	6	*****	*****	*****	*****	*****
235	125	4	*****	*****	*****	*****	*****
245	78	3	*****	*****	*****	*****	*****
255	51	2	*****	*****	*****	*****	*****
265	55	2	*****	*****	*****	*****	*****
275	42	1	*****	*****	*****	*****	*****
285	35	1	*****	*****	*****	*****	*****
295	28	1	***	*****	*****	*****	*****
305	29	1	***	*****	*****	*****	*****
315	28	1	***	*****	*****	*****	*****
325	42	1	*****	*****	*****	*****	*****
335	99	3	*****	*****	*****	*****	*****
345	128	4	*****	*****	*****	*****	*****
355	203	7	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2871  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M START DATE 08/11/73

MEDIAN (DEG.C)	FREQNCY NO.	PCT	60	120	180	240	300
6.43	0	0	.	.	.	.	.
6.49	1	0					
6.55	2	0					
6.61	0	0					
6.67	2	0					
6.73	0	0					
6.79	5	0	*				
6.85	3	0	*				
6.91	4	0	*				
6.97	5	0	*				
7.03	7	0	*				
7.09	16	1	***				
7.15	31	1	*****				
7.21	29	1	*****				
7.27	69	2	*****				
7.33	118	4	*****				
7.39	59	2	*****				
7.45	144	5	*****				
7.51	93	3	*****				
7.57	122	4	*****				
7.63	187	7	*****				
7.69	150	5	*****				
7.75	185	6	*****				
7.81	195	7	*****				
7.87	129	4	*****				
7.93	253	9	*****				
7.99	204	7	*****				
8.05	152	5	*****				
8.11	130	5	*****				
8.17	82	3	*****				
8.23	134	5	*****				
8.29	107	4	*****				
8.35	88	3	*****				
8.41	87	3	*****				
8.47	40	1	*****				
8.53	32	1	*****				
8.59	5	0	*				
8.65	0	0					
8.71	1	0					
8.77	0	0					

NO. OF SAMPLES OVER 8.80 = 0

NO. OF SAMPLES UNDER 6.40 = 0

TOTAL NO. OF OBSERVATIONS = 2871

SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M START DATE 08/11/73

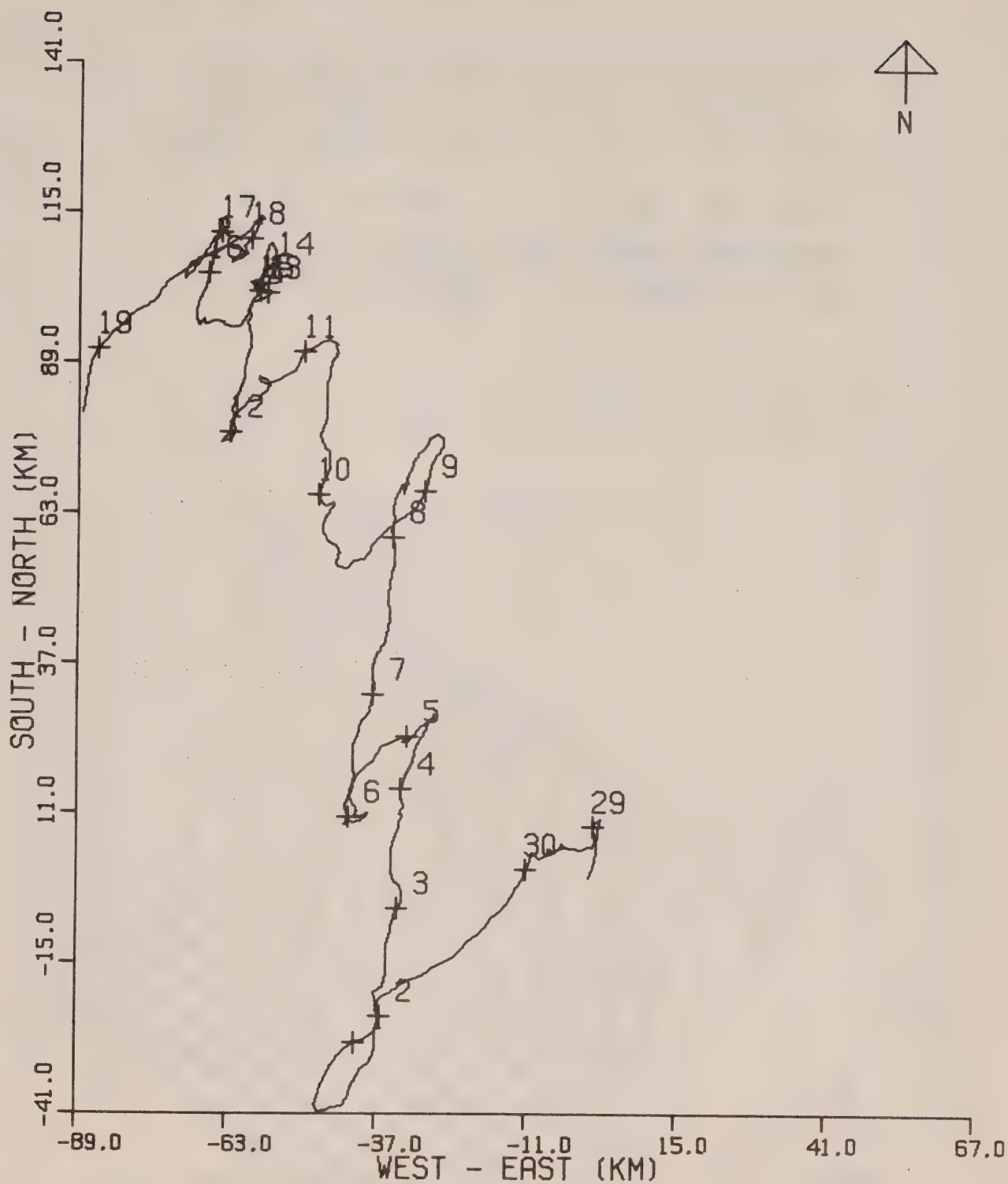
MEDIAN (PPT)	FREQUENCY NO. PCT	60	120	180	240	300
22.10	1 0	.	.	.	.	.
22.30	0 0					
22.50	1 0					
22.70	2 0					
22.90	3 0	*				
23.10	7 0	*				
23.30	17 1	***				
23.50	14 0	**				
23.70	26 1	****				
23.90	42 1	*****				
24.10	45 2	*****				
24.30	66 2	*****				
24.50	43 1	*****				
24.70	40 1	*****				
24.90	43 1	*****				
25.10	72 3	*****				
25.30	98 3	*****				
25.50	75 3	*****				
25.70	54 2	*****				
25.90	61 2	*****				
26.10	71 2	*****				
26.30	43 1	*****				
26.50	71 2	*****				
26.70	140 5	*****				
26.90	271 9	*****				
27.10	166 6	*****				
27.30	144 5	*****				
27.50	162 6	*****				
27.70	164 6	*****				
27.90	188 7	*****				
28.10	195 7	*****				
28.30	160 6	*****				
28.50	105 4	*****				
28.70	103 4	*****				
28.90	59 2	*****				
29.10	84 3	*****				
29.30	26 1	***				
29.50	9 0	**				
29.70	0 0					
29.90	0 0					

NO. OF SAMPLES OVER 30.00 = 0

NO. OF SAMPLES UNDER 22.00 = 0

TOTAL NO. OF OBSERVATIONS = 2871

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 5 M.

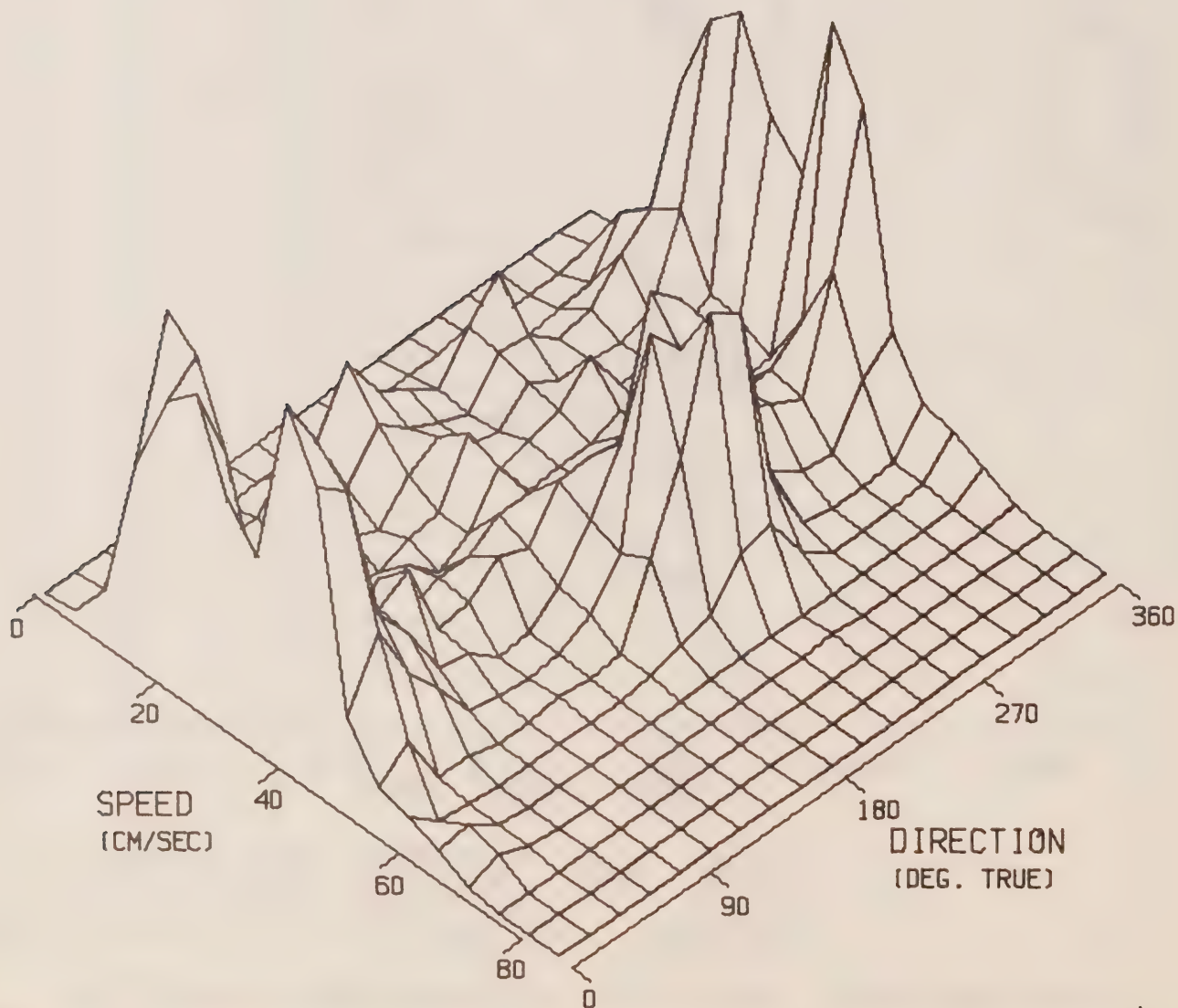
STARTING DATE: 28/11/73      ENDING DATE: 19/12/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 28/11/73

NO. OF SAMPLES = 3000



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 28/11/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	001	045	092	077	081	108	026	014	006				450
15- 29		066	082	044	051	085	033	009	005				375
30- 44	001	024	033	026	026	052	015		002				179
45- 59		004	013	015	020	027	009	002					90
60- 74	001	007	008	007	023	018	006	001					71
75- 89		004	007	003	026	014	002						56
90-104		003	002	004	006	008	001						24
105-119	001	005	002	001	012	004							25
120-134		008	003	005	010	005	001						32
135-149		009	001	003	011	004	001						29
150-164	001	029	007	003	016	005	003	001					65
165-179	002	014	020	021	018	024	013	001					113
180-194		012	012	007	013	029	029	007					109
195-209		010	004	006	011	039	073	012					155
210-224		003	006	008	007	059	053	026					162
225-239	001	008	007	009	020	068	108	033	001				255
240-254	001	038	010	010	021	041	050	018					189
255-269	001	007	007	015	009	025	024	004					92
270-284		004	004	005	009	019	008	001					50
285-299		004	006	006	007	016	003						42
300-314		005	007	007	006	021	003						49
315-329		009	010	003	007	016	001						46
330-344	002	018	014	007	008	032	010						91
345-359	003	022	052	056	032	066	018	002					251
	15		409		450		490		14		0		3000
		358		348		785		131		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M START DATE 28/11/73

MEDIAN (MM/S)	FREQUENCY NO. PCT .	50 .	100 .	150 .	200 .	250 .
11	0 0					
33	1 0					
55	3 0	*				
77	35 1	*****				
99	85 3	*****				
121	113 4	*****				
143	113 4	*****				
165	107 4	*****				
187	104 3	*****				
209	142 5	*****				
231	104 3	*****				
253	85 3	*****				
275	111 4	*****				
297	82 3	*****				
319	72 2	*****				
341	109 4	*****				
363	118 4	*****				
385	196 7	*****				
407	189 6	*****				
429	199 7	*****				
451	241 8	*****				
473	190 6	*****				
495	154 5	*****				
517	145 5	*****				
539	113 4	*****				
561	93 3	*****				
583	57 2	*****				
605	17 1	***				
627	8 0	**				
649	4 0	*				
671	5 0	*				
693	3 0	*				
715	2 0					
737	0 0					
759	0 0					
781	0 0					
803	0 0					
825	0 0					
847	0 0					
869	0 0					

NO. OF SAMPLES OVER 880 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M START DATE 28/11/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	70	140	210	280	350
5	330	11	*****	.	.	.	.
15	306	10	*****				
25	209	7	*****				
35	118	4	*****				
45	76	3	*****				
55	57	2	*****				
65	51	2	*****				
75	45	2	*****				
85	32	1	*****				
95	16	1	**				
105	12	0	**				
115	18	1	***				
125	21	1	***				
135	22	1	***				
145	21	1	***				
155	40	1	*****				
165	56	2	*****				
175	88	3	*****				
185	71	2	*****				
195	84	3	*****				
205	106	4	*****				
215	111	4	*****				
225	136	5	*****				
235	174	6	*****				
245	116	4	*****				
255	111	4	*****				
265	48	2	*****				
275	28	1	****				
285	38	1	*****				
295	25	1	****				
305	35	1	*****				
315	25	1	****				
325	36	1	*****				
335	49	2	*****				
345	116	4	*****				
355	173	6	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M START DATE 28/11/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT .	80 .	160 .	240 .	320 .	400 .
6.23	0	0					
6.29	0	0					
6.35	0	0					
6.41	4	0	*				
6.47	21	1	***				
6.53	26	1	***				
6.59	15	1	**				
6.65	51	2	*****				
6.71	73	2	*****				
6.77	105	4	*****				
6.83	132	4	*****				
6.89	139	5	*****				
6.95	216	7	*****				
7.01	167	6	*****				
7.07	239	8	*****				
7.13	183	6	*****				
7.19	88	3	*****				
7.25	124	4	*****				
7.31	94	3	*****				
7.37	73	2	*****				
7.43	90	3	*****				
7.49	176	6	*****				
7.55	118	4	*****				
7.61	131	4	*****				
7.67	69	2	*****				
7.73	109	4	*****				
7.79	112	4	*****				
7.85	68	2	*****				
7.91	84	3	*****				
7.97	63	2	*****				
8.03	43	1	*****				
8.09	64	2	*****				
8.15	31	1	****				
8.21	38	1	*****				
8.27	21	1	***				
8.33	12	0	**				
8.39	9	0	*				
8.45	6	0	*				
8.51	5	0	*				
8.57	1	0					

NO. OF SAMPLES OVER 8.60 = 0

NO. OF SAMPLES UNDER 6.20 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES

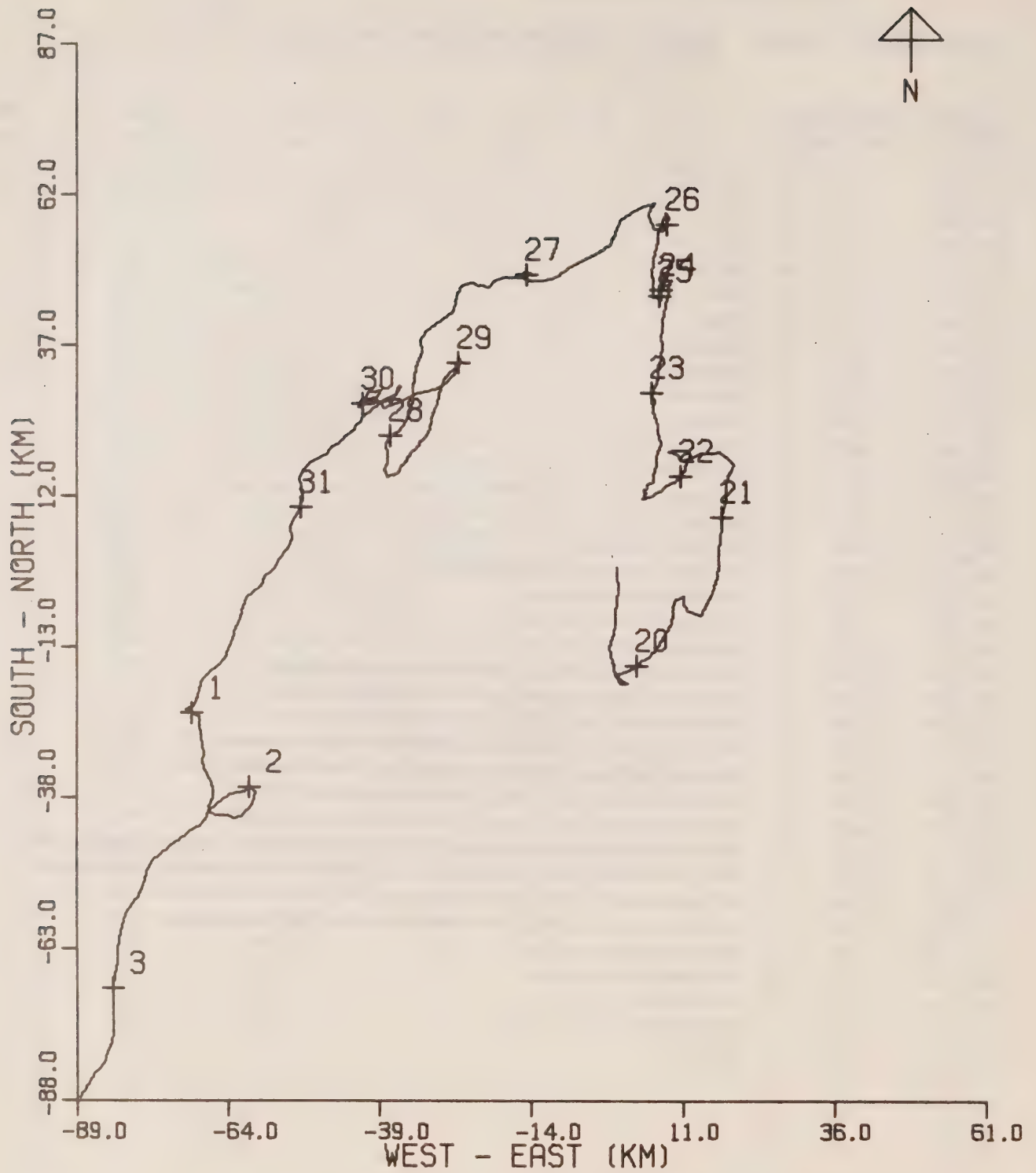
## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M START DATE 28/11/73

MEDIAN (PPT)	FREQUENCY NO. PCT	50	100	150	200	250
20.13	2 0	.	.	.	.	.
20.39	3 0	*				
20.65	4 0	*				
20.91	2 0					
21.17	9 0	**				
21.43	13 0	***				
21.69	13 0	***				
21.95	26 1	*****				
22.21	31 1	*****				
22.47	24 1	*****				
22.73	19 1	*****				
22.99	44 1	*****				
23.25	36 1	*****				
23.51	51 2	*****				
23.77	50 2	*****				
24.03	64 2	*****				
24.29	100 3	*****				
24.55	73 2	*****				
24.81	72 2	*****				
25.07	90 3	*****				
25.33	154 5	*****				
25.59	154 5	*****				
25.85	138 5	*****				
26.11	172 6	*****				
26.37	188 6	*****				
26.63	146 5	*****				
26.89	168 6	*****				
27.15	245 8	*****				
27.41	231 8	*****				
27.67	224 7	*****				
27.93	192 6	*****				
28.19	76 3	*****				
28.45	70 2	*****				
28.71	52 2	*****				
28.97	33 1	*****				
29.23	20 1	****				
29.49	6 0	*				
29.75	1 0					
30.01	0 0					
30.27	0 0					

NO. OF SAMPLES OVER 30.40 = 0  
 NO. OF SAMPLES UNDER 20.00 = 4  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES





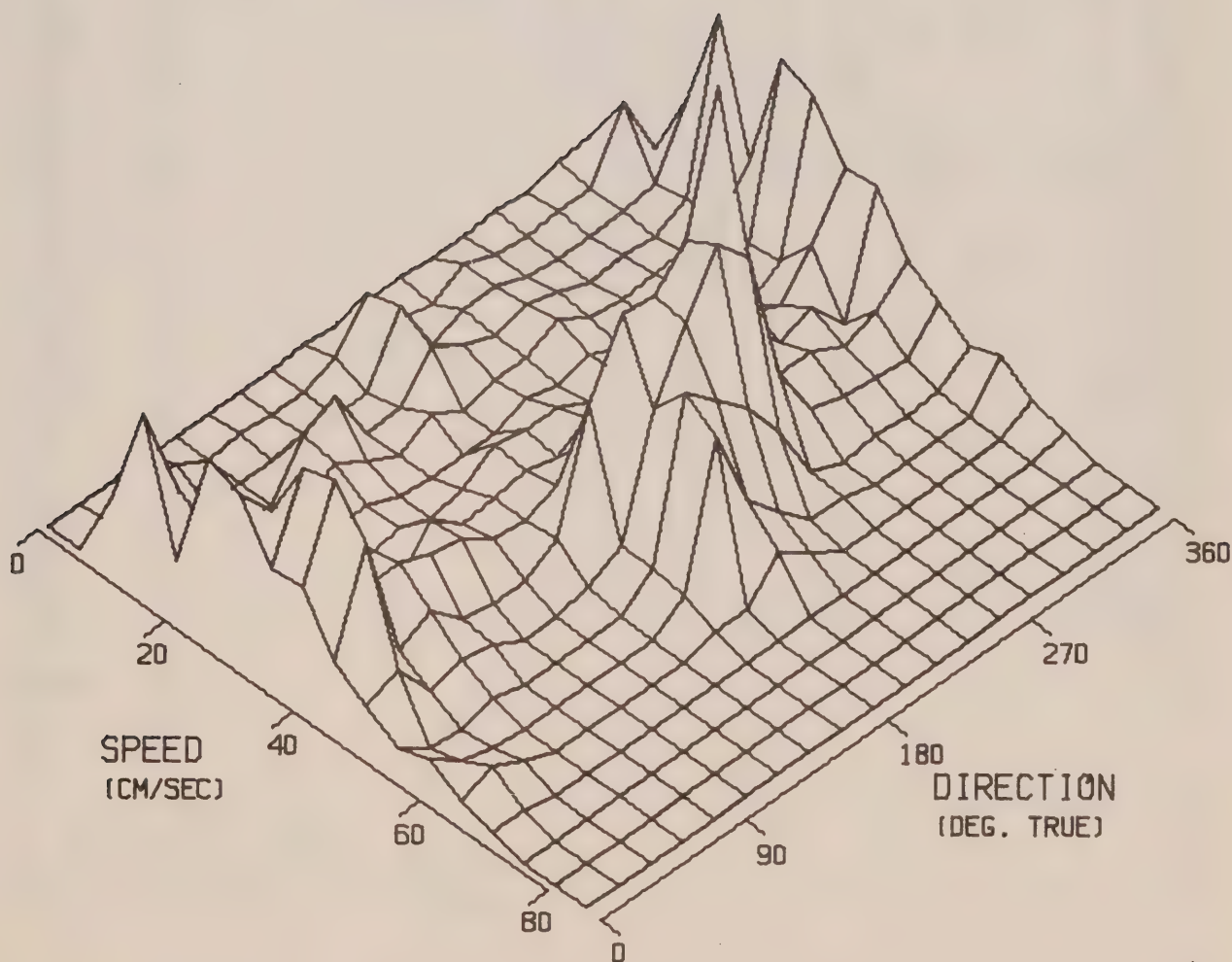
STN. NO. HS-5N

DEPTH 5 M.

STARTING DATE: 19/12/73    ENDING DATE: 3/ 1/74

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.  
STARTING DATE: 19/12/73  
NO. OF SAMPLES = 2198



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 19/12/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	002	015	024	055	054	044	012	013	004				223
15- 29		018	023	035	045	039	010	007	003				180
30- 44	007		009	023	034	015	002	004	001				95
45- 59	002	001	006	022	019	017	005	001					73
60- 74	002		002	006	019	018	003						50
75- 89			002	006	009	008							25
90-104	001	005	013	007	012	011	001						50
105-119		007	007	006	010	002							32
120-134		002	009	001	005	005							22
135-149		001		005	011	011							28
150-164	001		005	005	009	025	007	004					56
165-179	009	014	002	009	007	055	023	023					142
180-194	009	010	005	005	010	039	045	048					171
195-209	001	002	007	007	017	052	061	020	001				168
210-224	002	003	003	003	024	056	055	016	006				168
225-239		003	008		027	092	046	008					184
240-254	004	011	003	010	028	077	037	004					174
255-269	001		001	001	021	034	015	001					74
270-284	001		001	001	008	015	004						30
285-299			002	003	013	009	005						32
300-314	001		004	001	008	008	005						27
315-329	003		002		005	012	003						25
330-344	009		002	003	012	008	002						36
345-359	011	043	013	031	017	007	004	003	001				130
	66	153		424		345		16		0			2195
	135		245		659		152		0		0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 3

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M START DATE 19/12/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
11	6	0	*	.	.	.	.
33	17	1	***				
55	23	1	*****				
77	27	1	*****				
99	30	1	*****				
121	36	2	*****				
143	53	2	*****				
165	54	2	*****				
187	35	2	*****				
209	41	2	*****				
231	41	2	*****				
253	52	2	*****				
275	71	3	*****				
297	66	3	*****				
319	73	3	*****				
341	116	5	*****				
363	125	6	*****				
385	157	7	*****				
407	144	7	*****				
429	141	6	*****				
451	225	10	*****				
473	177	8	*****				
495	123	6	*****				
517	118	5	*****				
539	57	3	*****				
561	52	2	*****				
583	42	2	*****				
605	41	2	*****				
627	36	2	*****				
649	9	0	**				
671	5	0	*				
693	2	0					
715	0	0					
737	0	0					
759	0	0					
781	0	0					
803	0	0					
825	0	0					
847	0	0					
869	0	0					

NO. OF SAMPLES OVER 880 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2198  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M START DATE 19/12/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	50	100	150	200	250
5	158	7	*****				
15	151	7	*****				
25	107	5	*****				
35	62	3	*****				
45	51	2	*****				
55	45	2	*****				
65	36	2	*****				
75	23	1	*****				
85	14	1	***				
95	36	2	*****				
105	24	1	*****				
115	22	1	****				
125	20	1	****				
135	11	1	**				
145	20	1	****				
155	24	1	*****				
165	69	3	*****				
175	122	6	*****				
185	111	5	*****				
195	121	6	*****				
205	96	4	*****				
215	112	5	*****				
225	113	5	*****				
235	137	6	*****				
245	120	5	*****				
255	74	3	*****				
265	40	2	*****				
275	21	1	****				
285	21	1	****				
295	20	1	****				
305	23	1	*****				
315	16	1	***				
325	15	1	***				
335	27	1	*****				
345	38	2	*****				
355	98	4	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0

NO. OF SAMPLES UNDER 0 = 0

TOTAL NO. OF OBSERVATIONS = 2198

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M START DATE 19/12/73

MEDIAN (DEG.C)	FREQ NO.	PCT	100	200	300	400	500
6.53	0	0	.	.	.	.	.
6.59	0	0					
6.65	2	0					
6.71	8	0	*				
6.77	7	0	*				
6.83	1	0					
6.89	4	0					
6.95	16	1	**				
7.01	15	1	**				
7.07	29	1	***				
7.13	39	2	****				
7.19	36	2	****				
7.25	43	2	****				
7.31	85	4	*****				
7.37	93	4	*****				
7.43	122	6	*****				
7.49	157	7	*****				
7.55	151	7	*****				
7.61	357	16	*****				
7.67	213	10	*****				
7.73	230	10	*****				
7.79	175	8	*****				
7.85	69	3	*****				
7.91	72	3	*****				
7.97	34	2	***				
8.03	21	1	**				
8.09	37	2	****				
8.15	10	0	*				
8.21	27	1	***				
8.27	53	2	*****				
8.33	25	1	***				
8.39	36	2	****				
8.45	10	0	*				
8.51	6	0	*				
8.57	15	1	**				
8.63	0	0					
8.69	0	0					
8.75	0	0					
8.81	0	0					
8.87	0	0					

NO. OF SAMPLES OVER 8.90 = 0

NO. OF SAMPLES UNDER 6.50 = 0

TOTAL NO. OF OBSERVATIONS = 2198

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 5M START DATE 19/12/73

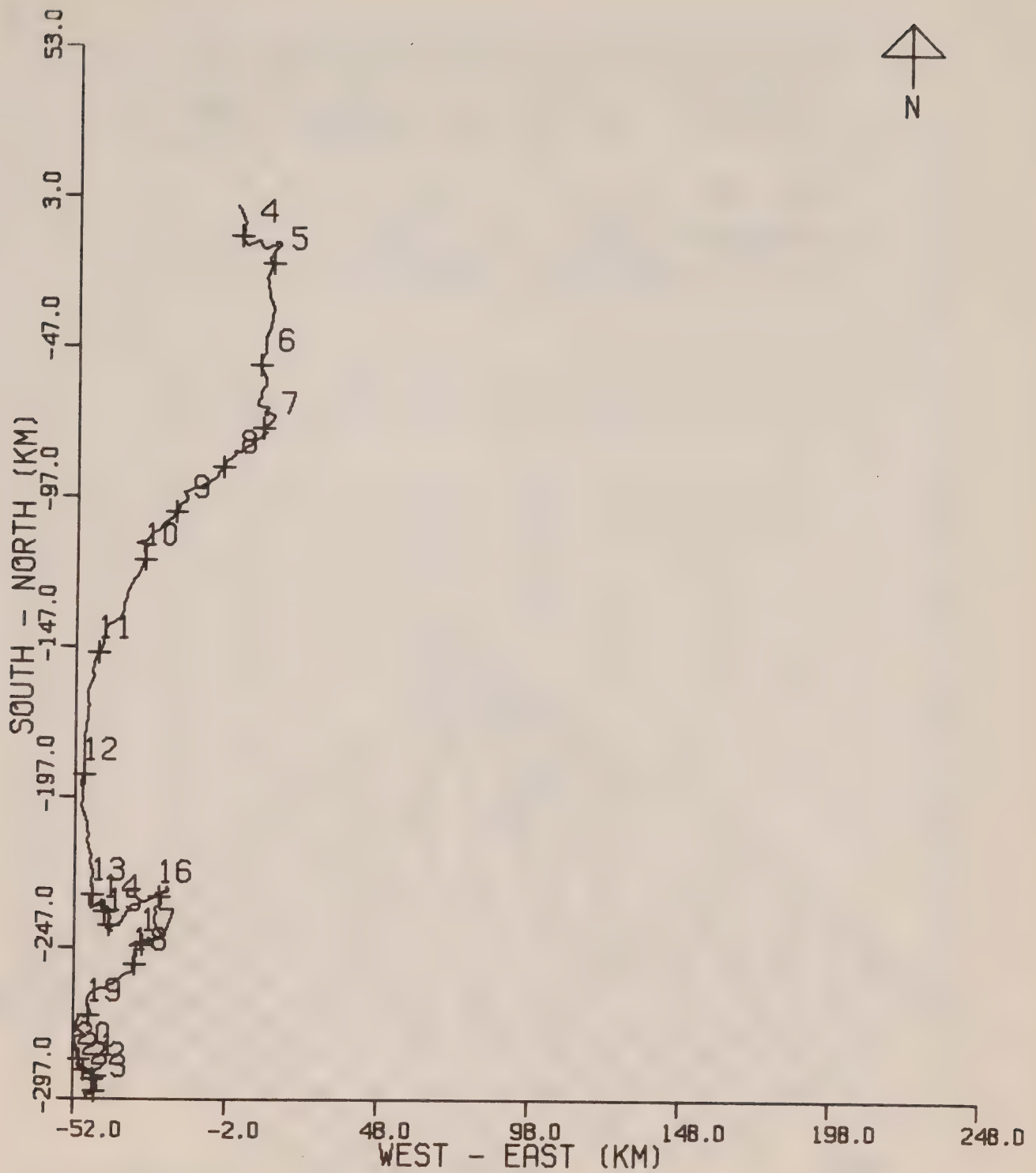
MEDIAN (PPT)	FREQUENCY NO.	PCT	40	80	120	160	200
24.67	1	0	.	.	.	.	.
24.81	5	0	*				
24.95	14	1	*****				
25.09	10	0	***				
25.23	8	0	**				
25.37	9	0	**				
25.51	19	1	*****				
25.65	25	1	*****				
25.79	29	1	*****				
25.93	47	2	*****				
26.07	41	2	*****				
26.21	51	2	*****				
26.35	58	3	*****				
26.49	70	3	*****				
26.63	101	5	*****				
26.77	130	6	*****				
26.91	109	5	*****				
27.05	112	5	*****				
27.19	106	5	*****				
27.33	81	4	*****				
27.47	51	2	*****				
27.61	61	3	*****				
27.75	95	4	*****				
27.89	86	4	*****				
28.03	56	3	*****				
28.17	50	2	*****				
28.31	57	3	*****				
28.45	89	4	*****				
28.59	74	3	*****				
28.73	89	4	*****				
28.87	112	5	*****				
29.01	83	4	*****				
29.15	79	4	*****				
29.29	59	3	*****				
29.43	78	4	*****				
29.57	33	2	*****				
29.71	10	0	***				
29.85	10	0	***				
29.99	0	0					
30.13	0	0					

NO. OF SAMPLES OVER 30.20 = 0

NO. OF SAMPLES UNDER 24.60 = 0

TOTAL NO. OF OBSERVATIONS = 2198

SAMPLE INTERVAL = 10 MINUTES



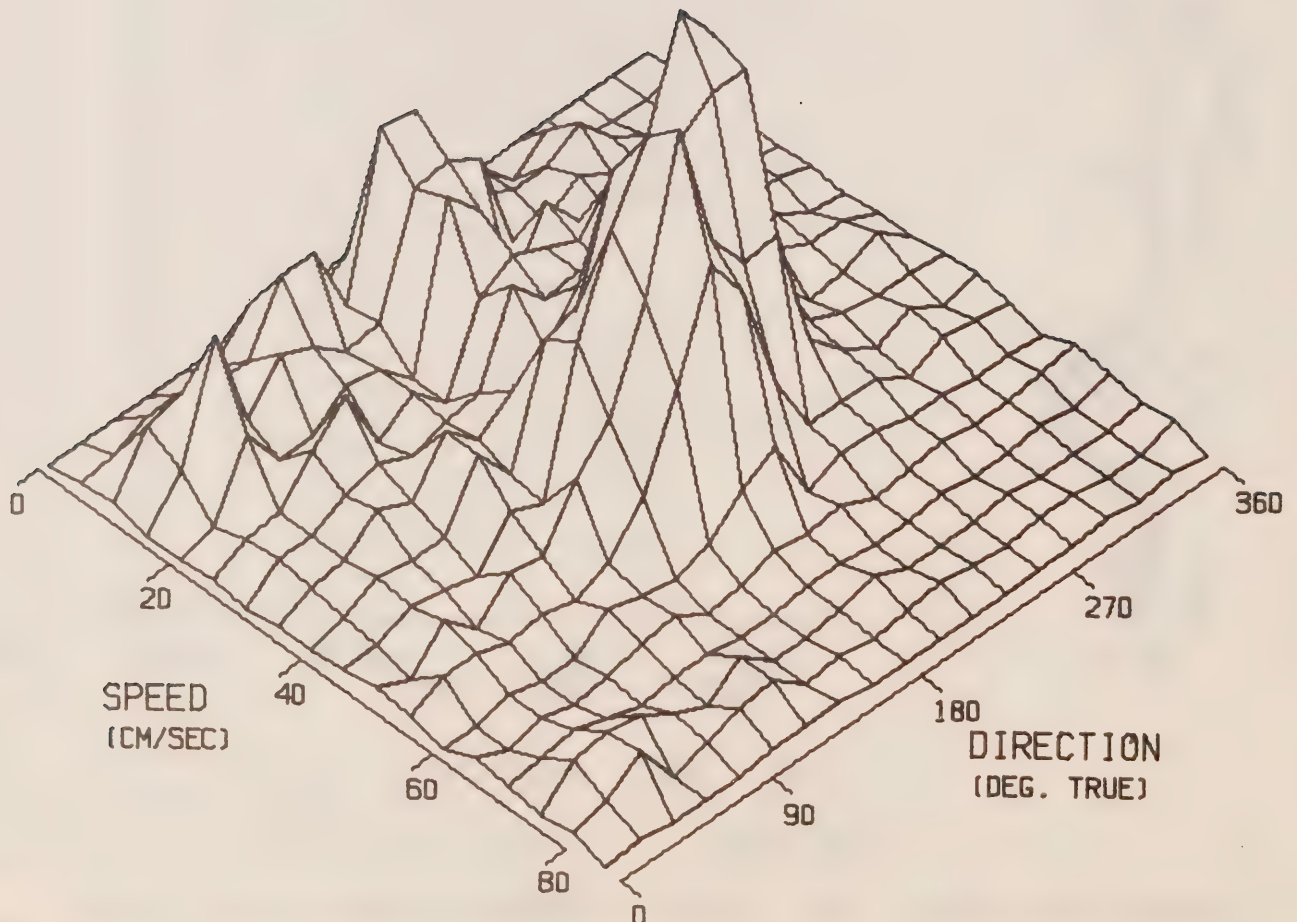


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 3/ 1/74

NO. OF SAMPLES = 2858



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 3/ 1/74  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	001	003	001		003	001	002		004		001		16
15- 29	001	015	001	007	004	003	002	003	003	008	004		51
30- 44	007	031	017	007	007	004	008	003	002	008	003		97
45- 59	004	022	012	009	009	004	005		003	010	001		79
60- 74	002	010	009	012	012	005	004		001	006			61
75- 89	006	012	014	016	004	003	006	001		002	001		65
90-104	010	027	010	011	017	011	008	006	002	002			104
105-119	006	027	015	012	016	011	010	003	003	005	003	001	112
120-134	007	012	006	008	013	017	012	004	001	004	002		86
135-149	002	015	006	009	023	039	028	005			001		128
150-164	007	042	039	017	020	050	043	009					227
165-179	023	033	031	038	031	076	059	018		001	001		311
180-194	008	056	030	023	036	073	076	016	002		001		321
195-209	002	022	012	020	030	080	048	015		003		001	233
210-224	007	011	018	020	043	085	042	004	002				232
225-239	008	011	018	017	046	080	030	005	001	001	001		218
240-254	001	012	010	030	050	062	021	003		001			190
255-269	003	011	010	022	033	020	011	004	002				116
270-284	007	016	009	006	011	011	006	003	002	002			73
285-299	002	010	004	004	015	005	003	003					46
300-314		003		005	004	004	002	003	002		002		25
315-329	002	001	004	003	004	002	006	002					24
330-344		001	006	001	007	003	003		002		001		24
345-359			001	001	002	005	005	001	001	001	001		18
	116		283		440		440		33		23		2857
	403			298		654		111		54		2	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 1

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M START DATE 03/01/74

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
11	0	0	.	.	.	.	.
33	5	0	*				
55	44	2	*****				
77	102	4	*****				
99	135	5	*****				
121	104	4	*****				
143	116	4	*****				
165	73	3	*****				
187	70	2	*****				
209	78	3	*****				
231	93	3	*****				
253	68	2	*****				
275	99	3	*****				
297	64	2	*****				
319	83	3	*****				
341	118	4	*****				
363	122	4	*****				
385	166	6	*****				
407	169	6	*****				
429	177	6	*****				
451	200	7	*****				
473	141	5	*****				
495	142	5	*****				
517	139	5	*****				
539	88	3	*****				
561	68	2	*****				
583	44	2	*****				
605	16	1	***				
627	21	1	****				
649	10	0	**				
671	9	0	**				
693	8	0	**				
715	8	0	**				
737	19	1	****				
759	14	0	***				
781	17	1	***				
803	13	0	***				
825	10	0	**				
847	1	0					
869	1	0					

NO. OF SAMPLES OVER 880 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2858  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M START DATE 03/01/74

MEDIAN (DEG.T)	FREQNCY NO.	PCT	50	100	150	200	250
5	11	0	★★				
15	14	0	★★★				
25	48	2	★★★★★★★★				
35	59	2	★★★★★★★★★★				
45	67	2	★★★★★★★★★★★				
55	52	2	★★★★★★★★				
65	32	1	★★★★★				
75	52	2	★★★★★★★★				
85	47	2	★★★★★★★★				
95	52	2	★★★★★★★★				
105	85	3	★★★★★★★★★★★★★★				
115	70	2	★★★★★★★★★★★★★★				
125	61	2	★★★★★★★★★★★★★★				
135	64	2	★★★★★★★★★★★★★★				
145	93	3	★★★★★★★★★★★★★★★★				
155	153	5	★★★★★★★★★★★★★★★★★★★★				
165	181	6	★★★★★★★★★★★★★★★★★★★★★★★★				
175	221	8	★★★★★★★★★★★★★★★★★★★★★★★★★★★★				
185	205	7	★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★				
195	200	7	★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★				
205	144	5	★★★★★★★★★★★★★★★★★★★★★★★★				
215	144	5	★★★★★★★★★★★★★★★★★★★★★★★★				
225	153	5	★★★★★★★★★★★★★★★★★★★★★★★★				
235	142	5	★★★★★★★★★★★★★★★★★★★★★★★★				
245	142	5	★★★★★★★★★★★★★★★★★★★★★★★★				
255	104	4	★★★★★★★★★★★★★★★★★★★★				
265	58	2	★★★★★★★★★★				
275	53	2	★★★★★★★★				
285	37	1	★★★★★★				
295	23	1	★★★★				
305	16	1	★★★				
315	16	1	★★★				
325	19	1	★★★★				
335	14	0	★★★				
345	16	1	★★★				
355	10	0	★★				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2858  
 SAMPLE INTERVAL = 10 MINUTES

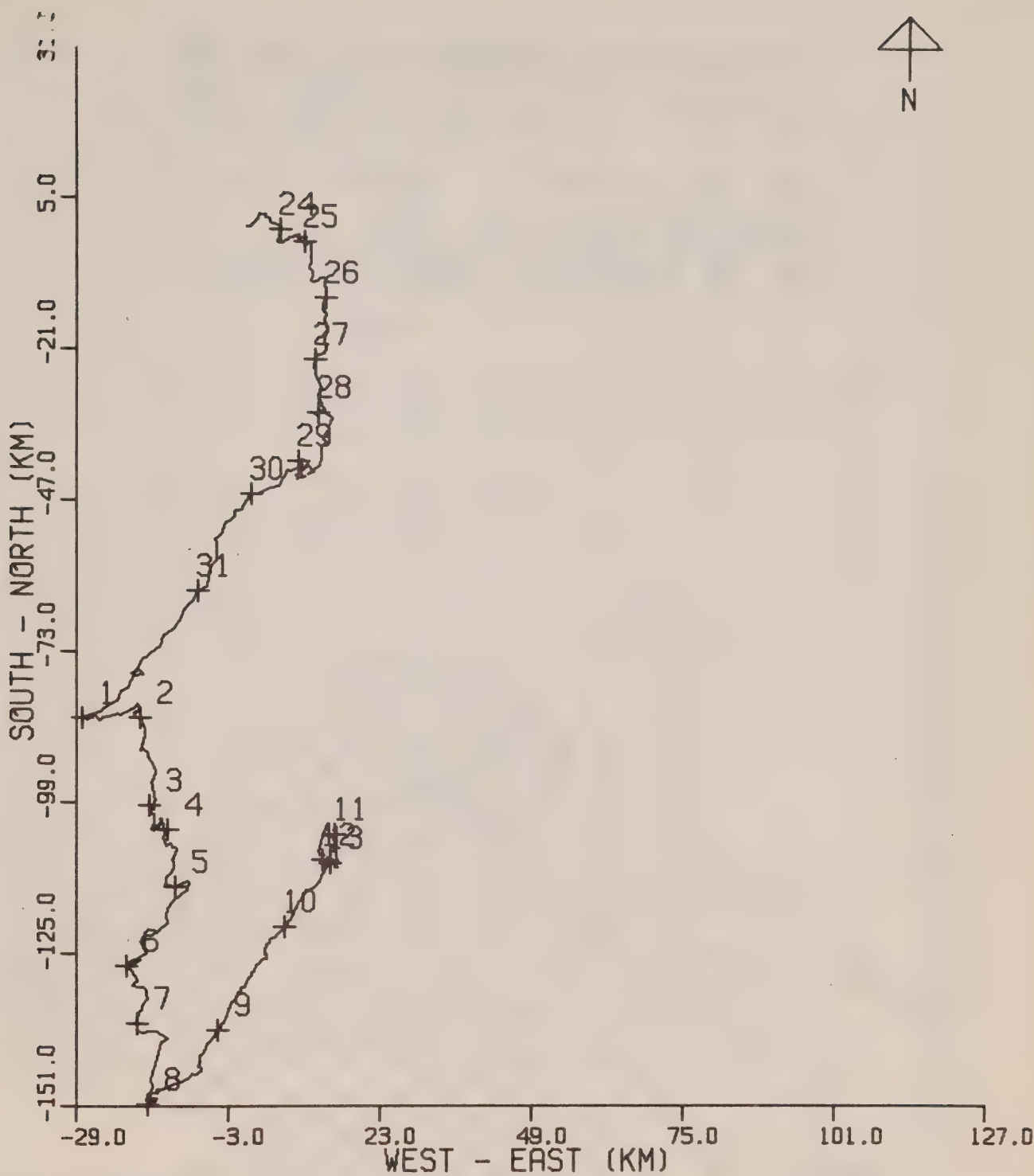


## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M START DATE 03/01/74

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	60	120	180	240	300
4.84	5	0	*	.	.	.	.
4.92	6	0	*				
5.00	3	0	*				
5.08	7	0	*				
5.16	40	1	*****				
5.24	35	1	*****				
5.32	79	3	*****				
5.40	65	2	*****				
5.48	154	5	*****				
5.56	119	4	*****				
5.64	195	7	*****				
5.72	167	6	*****				
5.80	230	8	*****				
5.88	192	7	*****				
5.96	236	8	*****				
6.04	237	8	*****				
6.12	109	4	*****				
6.20	173	6	*****				
6.28	98	3	*****				
6.36	55	2	*****				
6.44	34	1	*****				
6.52	35	1	*****				
6.60	39	1	*****				
6.68	48	2	*****				
6.76	38	1	*****				
6.84	43	2	*****				
6.92	50	2	*****				
7.00	35	1	*****				
7.08	73	3	*****				
7.16	38	1	*****				
7.24	74	3	*****				
7.32	29	1	*****				
7.40	35	1	*****				
7.48	24	1	****				
7.56	12	0	**				
7.64	11	0	**				
7.72	15	1	***				
7.80	12	0	**				
7.88	7	0	*				
7.96	0	0					

NO. OF SAMPLES OVER 8.00 = 0  
 NO. OF SAMPLES UNDER 4.80 = 1  
 TOTAL NO. OF OBSERVATIONS = 2858  
 SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 5 M.

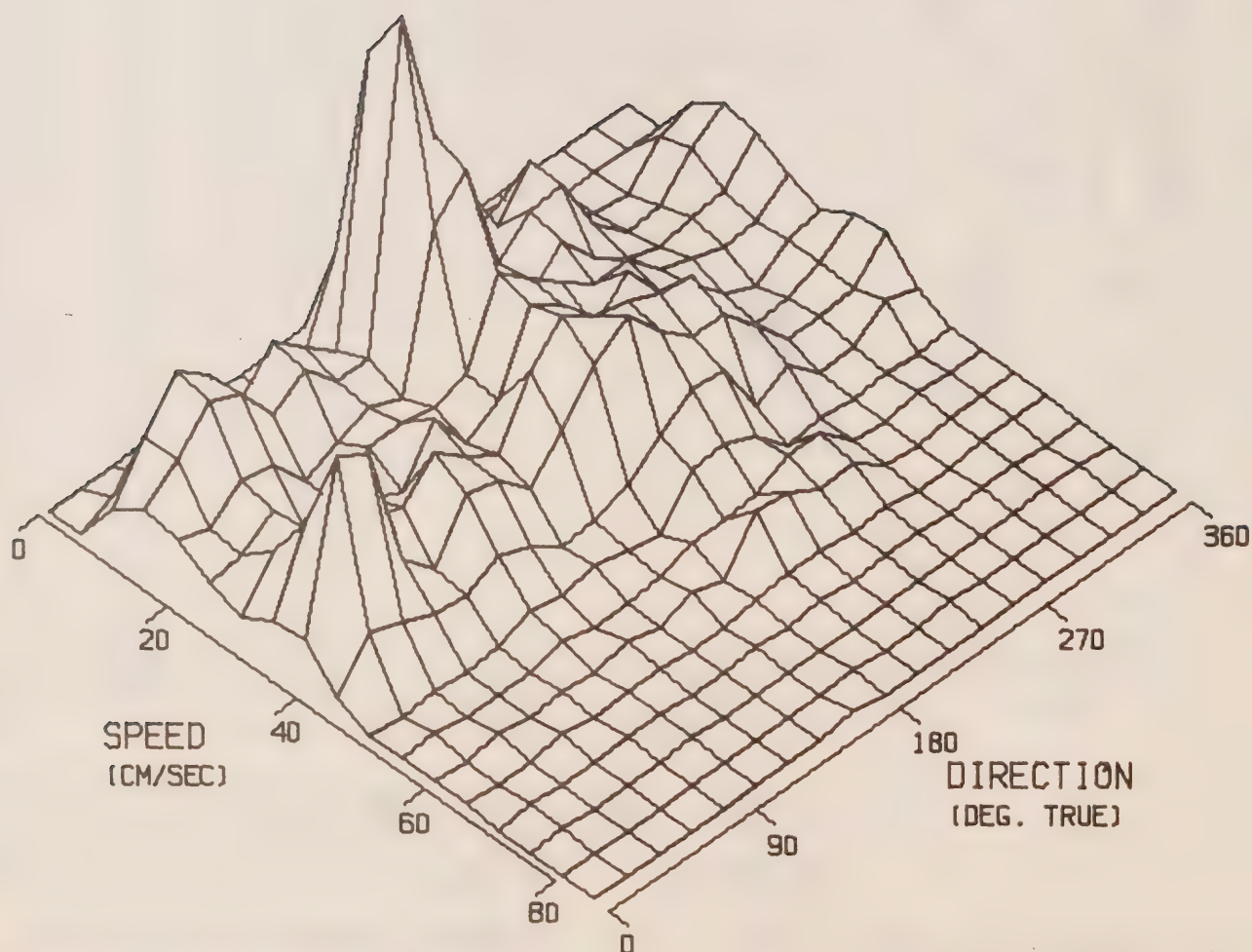
STARTING DATE: 23/ 1/74    ENDING DATE: 13/ 2/74

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH    5 M.

STARTING DATE: 23/ 1/74

NO. OF SAMPLES = 3000



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 23/ 1/74  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	001	016	025	013	022	006	002	001					86
15- 29	004	038	014	021	050	038	001		001	001			168
30- 44	006	048	023	023	053	041		001					195
45- 59	001	039	027	012	027	016		002	001				125
60- 74	002	039	019	013	019	013							105
75- 89	002	016	013	017	016	010		001	001				76
90-104	003	029	014	018	026	020	002	001	001	001			115
105-119	003	029	026	021	034	016	006	003					138
120-134	003	008	020	022	018	009							80
135-149	003	015	017	015	014	009	003						76
150-164	025	084	055	021	033	009	001		001				229
165-179	032	120	066	034	033	015	002	005		001	002		310
180-194	011	055	055	046	048	023	003	007	001				249
195-209	007	040	039	032	036	029	008	010	002				203
210-224	002	035	015	023	038	028	010	011	001				163
225-239	005	020	024	027	026	026	012	009	001				150
240-254	004	029	022	031	030	029	003	009	001	001			159
255-269	008	038	020	020	027	009	004	007		001			134
270-284	003	014	012	014	010	013	001	003					70
285-299		002	008	011	004	008			001				34
300-314			005	001	002	005							13
315-329		002	004	004	004	002	003		002	001			22
330-344		013	004	003	008	007	001	002	001	001			40
345-359		017	013	007	008	011	001	001					58
	125		540		586		63		15		2		2998
		746		449		392		73		7		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 2



## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M START DATE 23/01/74

MEDIAN (MM/S)	FREQUENCY NO, PCT	50	100	150	200	250
11	1 0	.	.	.	.	.
33	15 1	***				
55	46 2	*****				
77	110 4	*****				
99	201 7	*****				
121	221 7	*****				
143	243 8	*****				
165	160 5	*****				
187	157 5	*****				
209	145 5	*****				
231	133 4	*****				
253	107 4	*****				
275	120 4	*****				
297	120 4	*****				
319	135 5	*****				
341	206 7	*****				
363	156 5	*****				
385	170 6	*****				
407	161 5	*****				
429	119 4	*****				
451	80 3	*****				
473	38 1	*****				
495	17 1	***				
517	17 1	***				
539	17 1	***				
561	15 1	***				
583	31 1	*****				
605	19 1	****				
627	14 0	***				
649	5 0	*				
671	2 0					
693	4 0	*				
715	5 0	*				
737	2 0					
759	2 0					
781	1 0					
803	1 0					
825	0 0					
847	2 0					
869	0 0					

NO. OF SAMPLES OVER 880 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M START DATE 23/01/74

MEDIAN (DEG.T)	FREQNCY NO.	PCT	50	100	150	200	250
5	66	2	*****				
15	67	2	*****				
25	138	5	*****				
35	133	4	*****				
45	102	3	*****				
55	77	3	*****				
65	68	2	*****				
75	53	2	*****				
85	55	2	*****				
95	76	3	*****				
105	88	3	*****				
115	94	3	*****				
125	51	2	*****				
135	51	2	*****				
145	55	2	*****				
155	137	5	*****				
165	222	7	*****				
175	192	6	*****				
185	162	5	*****				
195	173	6	*****				
205	107	4	*****				
215	102	3	*****				
225	113	4	*****				
235	99	3	*****				
245	109	4	*****				
255	91	3	*****				
265	88	3	*****				
275	48	2	*****				
285	31	1	*****				
295	19	1	****				
305	7	0	*				
315	13	0	***				
325	16	1	***				
335	21	1	****				
345	41	1	*****				
355	35	1	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M START DATE 23/01/74

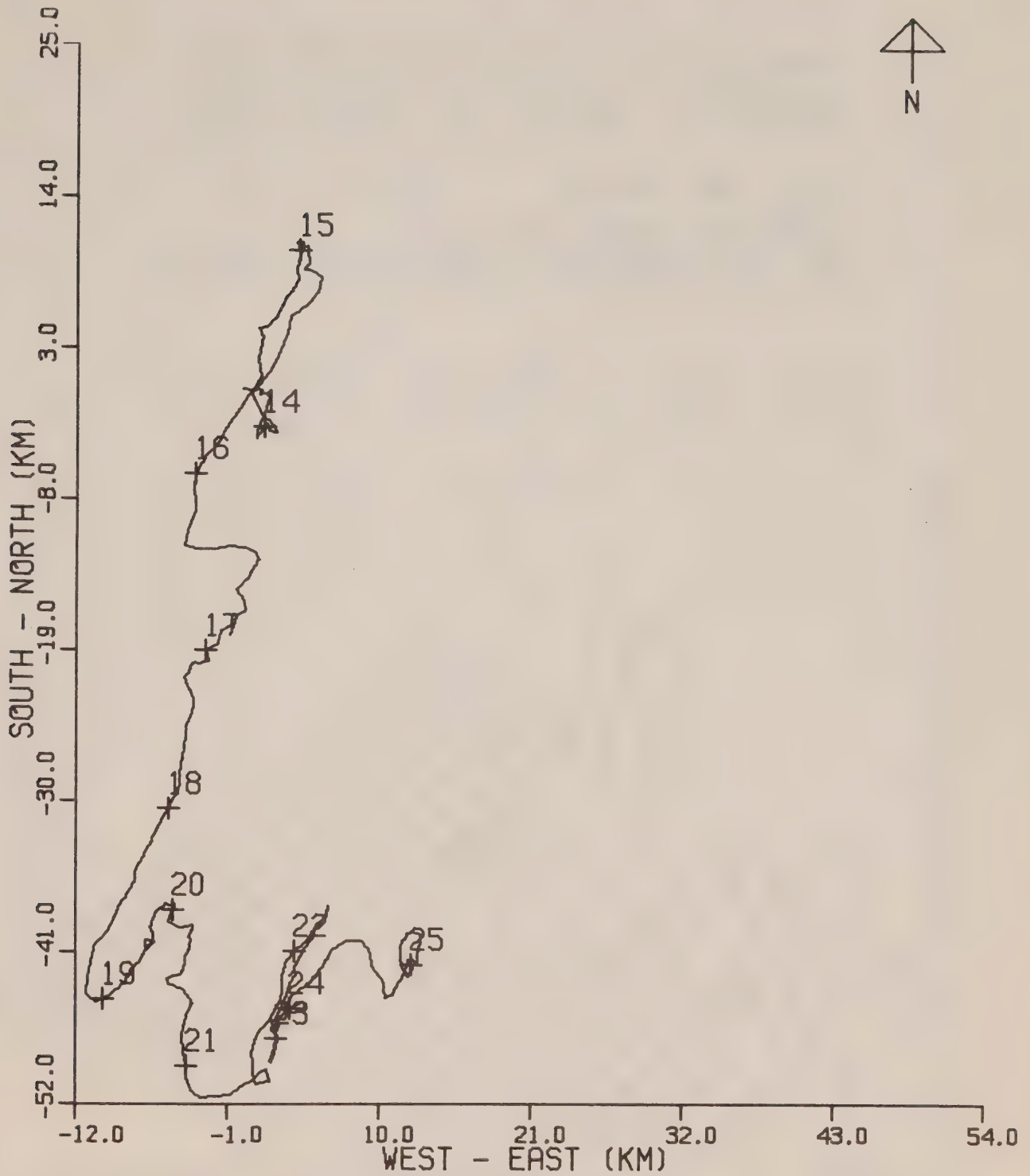
MEDIAN (DEG.C)	FREQUENCY NO.	PCT	40	80	120	160	200
4.83	0	0	.	.	.	.	.
4.89	0	0					
4.95	15	1	*****				
5.01	28	1	*****				
5.07	69	2	*****				
5.13	62	2	*****				
5.19	65	2	*****				
5.25	76	3	*****				
5.31	111	4	*****				
5.37	83	3	*****				
5.43	153	5	*****				
5.49	119	4	*****				
5.55	60	2	*****				
5.61	124	4	*****				
5.67	111	4	*****				
5.73	87	3	*****				
5.79	120	4	*****				
5.85	141	5	*****				
5.91	107	4	*****				
5.97	160	5	*****				
6.03	166	6	*****				
6.09	62	2	*****				
6.15	125	4	*****				
6.21	76	3	*****				
6.27	46	2	*****				
6.33	90	3	*****				
6.39	81	3	*****				
6.45	61	2	*****				
6.51	76	3	*****				
6.57	70	2	*****				
6.63	65	2	*****				
6.69	109	4	*****				
6.75	83	3	*****				
6.81	60	2	*****				
6.87	57	2	*****				
6.93	45	2	*****				
6.99	12	0	***				
7.05	14	0	***				
7.11	11	0	***				
7.17	0	0					

NO. OF SAMPLES OVER 7.20 = 0

NO. OF SAMPLES UNDER 4.80 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 5 M.

STARTING DATE: 13/ 2/74      ENDING DATE: 25/ 2/74

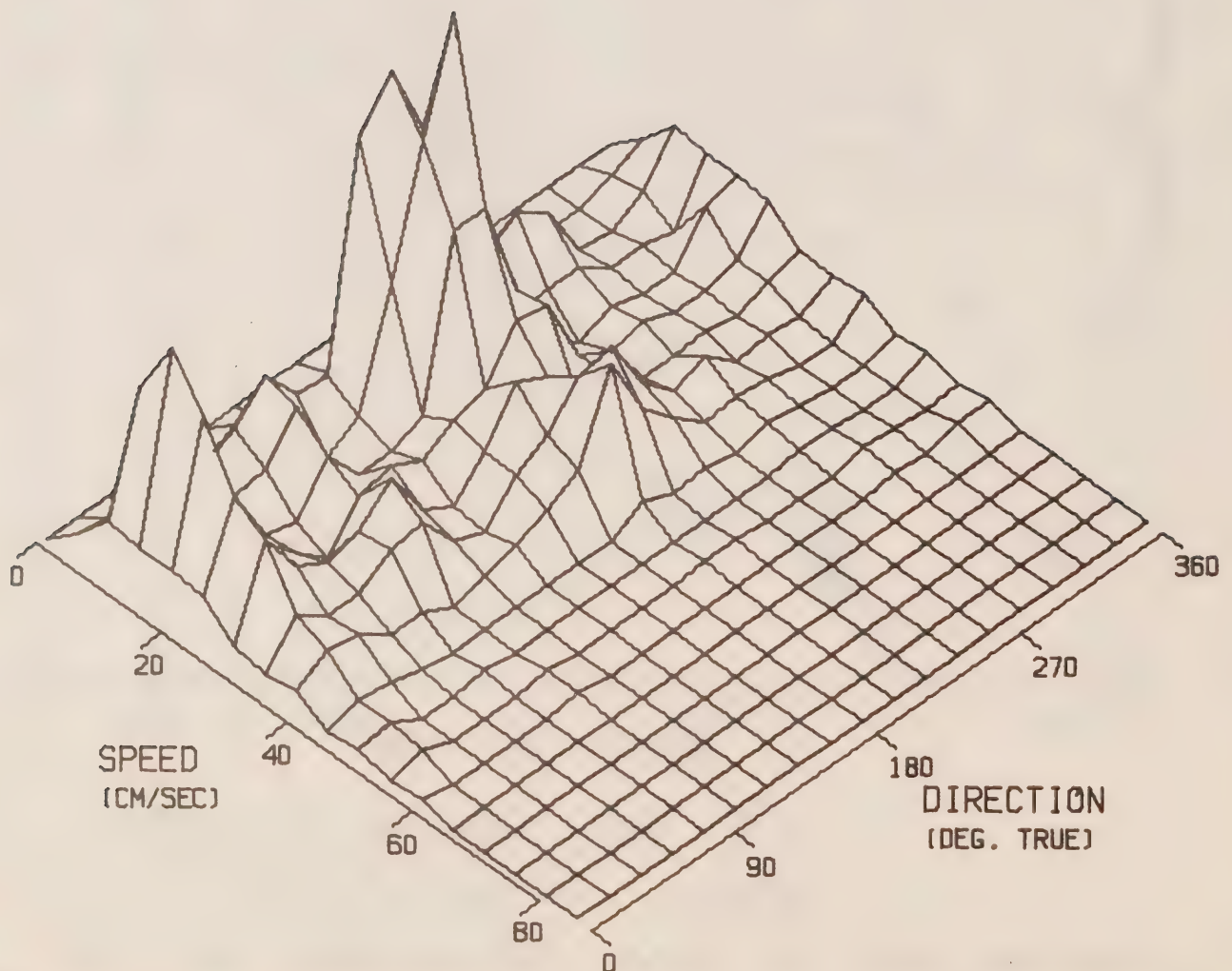


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 5 M.

STARTING DATE: 13/ 2/74

NO. OF SAMPLES = 1784



STN. NO. HS-5N DEPTH 5 M.

STARTING DATE: 13/ 2/74  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

DIR	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	004	028	024	016	017	008	001	002					100
15- 29	004	055	056	038	012	007	005						177
30- 44	006	037	025	023	007	007							105
45- 59	002	011	009	016	007	005							50
60- 74	003	014	008	005	010	002							42
75- 89	002	019	003	011	010	001	001						47
90-104	007	022	017	014	015			002					77
105-119	006	017	014	019	011	001							68
120-134		008	007	007	001								23
135-149		016	005	006	005	001							33
150-164	004	055	015	015	009								98
165-179	008	075	029	015	016	003							146
180-194	009	086	060	030	017	001							203
195-209	005	087	049	024	035	014							214
210-224	003	055	033	017	027	008	002						145
225-239	003	014	010	010	019	005							61
240-254	001	009	007	006	009	003							35
255-269	006	018		004	002	001							31
270-284	002	020	004	005	003	003							37
285-299		002	001	006	005	003	002	002					21
300-314		002	003	002	002	001	001						11
315-329		001	002	002	001		001						7
330-344	001	001	007	003				001					13
345-359	009	008	010	006	002		004	001					40
	85		398		242		17		0		0		1784
		660		300		74		8		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 5M. START DATE 13/02/74

MEDIAN (MM/S)	FREQUENCY NO.	PCT	30	60	90	120	150
8	0	0	.	.	.	.	.
24	1	0					
40	3	0	*				
56	17	1	*****				
72	64	4	*****				
88	136	8	*****				
104	146	8	*****				
120	145	8	*****				
136	130	7	*****				
152	103	6	*****				
168	103	6	*****				
184	99	6	*****				
200	84	5	*****				
216	66	4	*****				
232	63	4	*****				
248	45	3	*****				
264	72	4	*****				
280	55	3	*****				
296	53	3	*****				
312	58	3	*****				
328	60	3	*****				
344	60	3	*****				
360	44	2	*****				
376	46	3	*****				
392	38	2	*****				
408	35	2	*****				
424	17	1	*****				
440	8	0	***				
456	5	0	**				
472	4	0	*				
488	2	0	*				
504	4	0	*				
520	4	0	*				
536	7	0	**				
552	0	0					
568	2	0	*				
584	1	0					
600	2	0	*				
616	3	0	*				
632	0	0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1785  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 5M, START DATE 13/02/74

MEDIAN (DEG.T)	FREQNCY NO.	PCT	30	60	90	120	150
5	59	3	*****				
15	130	7	*****				
25	99	6	*****				
35	66	4	*****				
45	46	3	*****				
55	36	2	*****				
65	27	2	*****				
75	26	1	*****				
85	37	2	*****				
95	52	3	*****				
105	55	3	*****				
115	35	2	*****				
125	15	1	*****				
135	20	1	*****				
145	22	1	*****				
155	63	4	*****				
165	81	5	*****				
175	104	6	*****				
185	139	8	*****				
195	148	8	*****				
205	142	8	*****				
215	97	5	*****				
225	59	3	*****				
235	33	2	*****				
245	26	1	*****				
255	20	1	*****				
265	23	1	*****				
275	27	2	*****				
285	19	1	*****				
295	8	0	***				
305	9	1	***				
315	5	0	**				
325	4	0	*				
335	6	0	**				
345	23	1	*****				
355	24	1	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1785  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 5M START DATE 13/02/74

MEDIAN (DEG.C)	FREQUNCY NO.	PCT	30	60	90	120	150
5.42	0	0	.	.	.	.	.
5.46	2	0	*				
5.50	6	0	**				
5.54	68	4	*****				
5.58	35	2	*****				
5.62	15	1	*****				
5.66	18	1	*****				
5.70	62	3	*****				
5.74	16	1	*****				
5.78	20	1	*****				
5.82	35	2	*****				
5.86	45	3	*****				
5.90	81	5	*****				
5.94	36	2	*****				
5.98	60	3	*****				
6.02	60	3	*****				
6.06	43	2	*****				
6.10	39	2	*****				
6.14	61	3	*****				
6.18	38	2	*****				
6.22	65	4	*****				
6.26	37	2	*****				
6.30	81	5	*****				
6.34	103	6	*****				
6.38	102	6	*****				
6.42	103	6	*****				
6.46	44	2	*****				
6.50	91	5	*****				
6.54	78	4	*****				
6.58	96	5	*****				
6.62	44	2	*****				
6.66	63	4	*****				
6.70	46	3	*****				
6.74	36	2	*****				
6.78	18	1	*****				
6.82	20	1	*****				
6.86	15	1	*****				
6.90	2	0	*				
6.94	0	0					
6.98	0	0					

NO. OF SAMPLES OVER 7.00 = 0

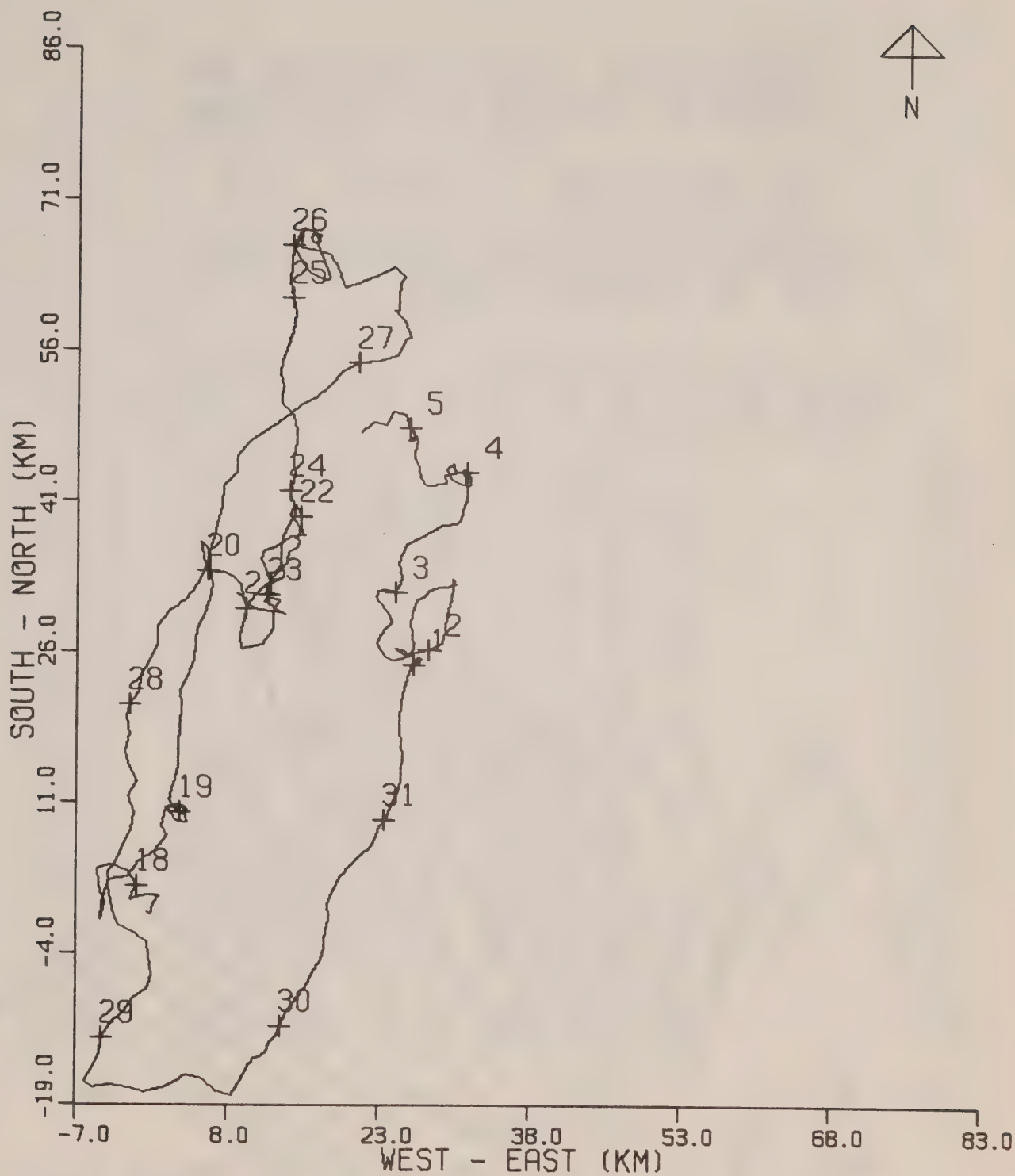
NO. OF SAMPLES UNDER 5.40 = 0

TOTAL NO. OF OBSERVATIONS = 1784

SAMPLE INTERVAL = 10 MINUTES

DATA FOR 7-METRE DEPTH





STN. NO. HS-5S

DEPTH 7 M.

STARTING DATE: 17/ 1/73      ENDING DATE: 5/ 2/73

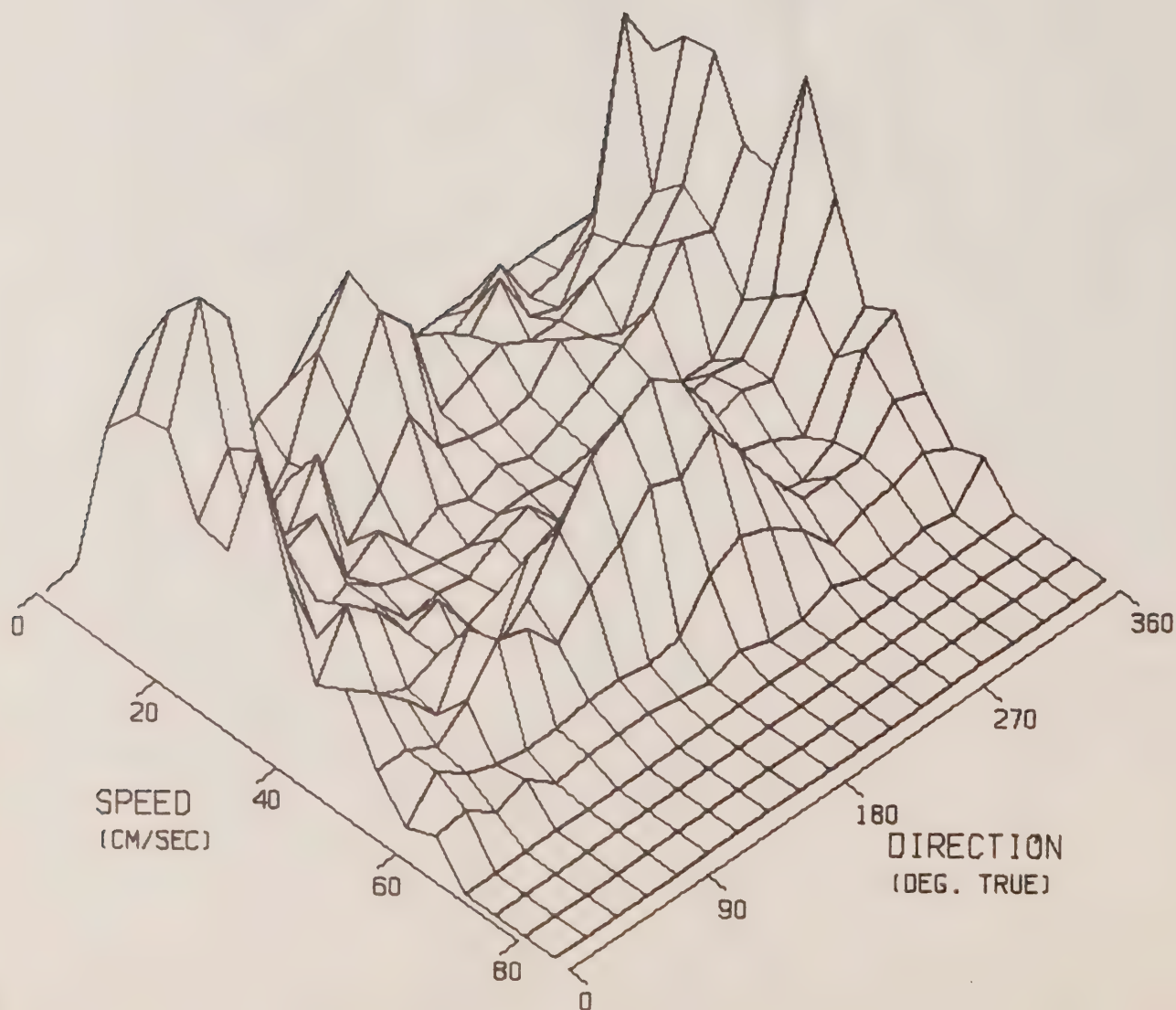


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    7 M.

STARTING DATE: 17/ 1/73

NO. OF SAMPLES = 2694



STN. NO. H8-58 DEPTH 7 M.

STARTING DATE: 17/ 1/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	006	053	044	037	054	034	016	010					254
15- 29	007	049	096	036	030	028	013	012	002				273
30- 44	008	049	071	029	021	014	014	011	001				218
45- 59	002	008	028	014	015	012	011	005	001				96
60- 74	004	008	014	014	006	010	012	010	003				81
75- 89	004	005	013	013	008	010	020	006					79
90-104	002	002	020	007	009	008	015	004	002				69
105-119	008	007	011	005	003	003	014	007	001				59
120-134	010	019	003	005	002	007	017	004	001				68
135-149	016	018	012	001	004	015	025	008					99
150-164	021	042	022	002	005	015	033	004	001				145
165-179	006	026	020	002	008	017	036	006					121
180-194	006	020	006	002	007	017	042	008					108
195-209	004	014	005	007	001	010	042	013	001				97
210-224		010	005	003	004	011	040	019					92
225-239	001	015		003	003	018	034	015					89
240-254	001	018	008	006	007	008	024	007					79
255-269	004	010	013	009	012	006	016	008	001				79
270-284	010	005	008	015	007	007	007	003					62
285-299	002	007	009	011	010	006	003	004					52
300-314		003	013	007	012	010	006	002					53
315-329	002	013	021	015	012	002	008	003	001				77
330-344	005	044	025	017	012	015	018	010					146
345-359	008	042	036	024	035	023	016	012	002				198
	137		503		287		482		17		0		2694
		487		284		306		191		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 7M, START DATE 17/01/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	30	60	90	120	150
9	0	0	.	.	.	.	.
27	17	1	*****				
45	38	1	*****				
63	65	2	*****				
81	95	4	*****				
99	84	3	*****				
117	156	6	*****				
135	90	3	*****				
153	79	3	*****				
171	142	5	*****				
189	125	5	*****				
207	131	5	*****				
225	84	3	*****				
243	84	3	*****				
261	81	3	*****				
279	50	2	*****				
297	57	2	*****				
315	46	2	*****				
333	67	2	*****				
351	77	3	*****				
369	56	2	*****				
387	74	3	*****				
405	60	2	*****				
423	57	2	*****				
441	64	2	*****				
459	65	2	*****				
477	102	4	*****				
495	130	5	*****				
513	97	4	*****				
531	120	4	*****				
549	93	3	*****				
567	66	2	*****				
585	51	2	*****				
603	39	1	*****				
621	27	1	*****				
639	15	1	*****				
657	8	0	***				
675	2	0	*				
693	0	0					
711	0	0					

NO. OF SAMPLES OVER 720 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2694  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5S DEPTH 7M. START DATE 17/01/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	193	7	*****	*****	*****	*****	*****
15	182	7	*****	*****	*****	*****	*****
25	168	6	*****	*****	*****	*****	*****
35	169	6	*****	*****	*****	*****	*****
45	75	3	*****	*****	*****	*****	*****
55	57	2	*****	*****	*****	*****	*****
65	46	2	*****	*****	*****	*****	*****
75	66	2	*****	*****	*****	*****	*****
85	48	2	*****	*****	*****	*****	*****
95	49	2	*****	*****	*****	*****	*****
105	44	2	*****	*****	*****	*****	*****
115	35	1	*****	*****	*****	*****	*****
125	43	2	*****	*****	*****	*****	*****
135	55	2	*****	*****	*****	*****	*****
145	73	3	*****	*****	*****	*****	*****
155	94	3	*****	*****	*****	*****	*****
165	91	3	*****	*****	*****	*****	*****
175	80	3	*****	*****	*****	*****	*****
185	74	3	*****	*****	*****	*****	*****
195	65	2	*****	*****	*****	*****	*****
205	66	2	*****	*****	*****	*****	*****
215	63	2	*****	*****	*****	*****	*****
225	63	2	*****	*****	*****	*****	*****
235	51	2	*****	*****	*****	*****	*****
245	57	2	*****	*****	*****	*****	*****
255	52	2	*****	*****	*****	*****	*****
265	49	2	*****	*****	*****	*****	*****
275	44	2	*****	*****	*****	*****	*****
285	35	1	*****	*****	*****	*****	*****
295	39	1	*****	*****	*****	*****	*****
305	32	1	*****	*****	*****	*****	*****
315	40	1	*****	*****	*****	*****	*****
325	61	2	*****	*****	*****	*****	*****
335	94	3	*****	*****	*****	*****	*****
345	111	4	*****	*****	*****	*****	*****
355	130	5	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2694  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS=55 DEPTH 7M. START DATE 17/01/73

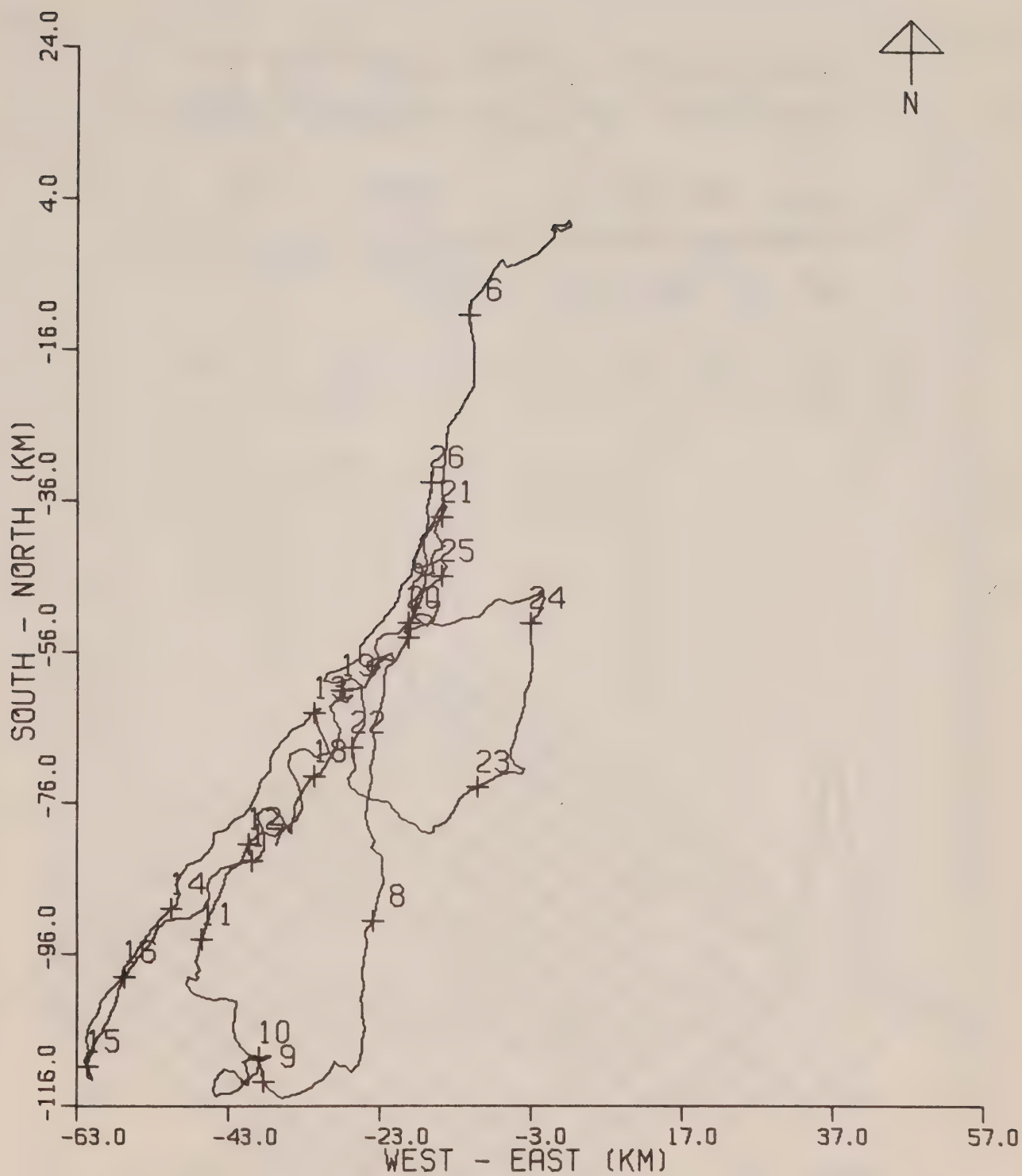
MEDIAN (DEG.C)	FREQUENCY NO.	PCT .	60	120	180	240	300
5.04	2	0	.	.	.	.	.
5.12	4	0	*				
5.20	46	2	*****				
5.28	80	3	*****				
5.36	124	5	*****				
5.44	156	6	*****				
5.52	146	5	*****				
5.60	91	3	*****				
5.68	127	5	*****				
5.76	76	3	*****				
5.84	117	4	*****				
5.92	91	3	*****				
6.00	181	7	*****				
6.08	239	9	*****				
6.16	160	6	*****				
6.24	177	7	*****				
6.32	78	3	*****				
6.40	76	3	*****				
6.48	38	1	*****				
6.56	23	1	****				
6.64	18	1	***				
6.72	23	1	****				
6.80	14	1	**				
6.88	11	0	**				
6.96	17	1	***				
7.04	6	0	*				
7.12	16	1	***				
7.20	8	0	*				
7.28	26	1	****				
7.36	38	1	*****				
7.44	65	2	*****				
7.52	108	4	*****				
7.60	114	4	*****				
7.68	94	3	*****				
7.76	72	3	*****				
7.84	32	1	*****				
7.92	0	0					
8.00	0	0					
8.08	0	0					
8.16	0	0					

NO. OF SAMPLES OVER 8.20 = 0

NO. OF SAMPLES UNDER 5.00 = 0

TOTAL NO. OF OBSERVATIONS = 2694

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 7 M.

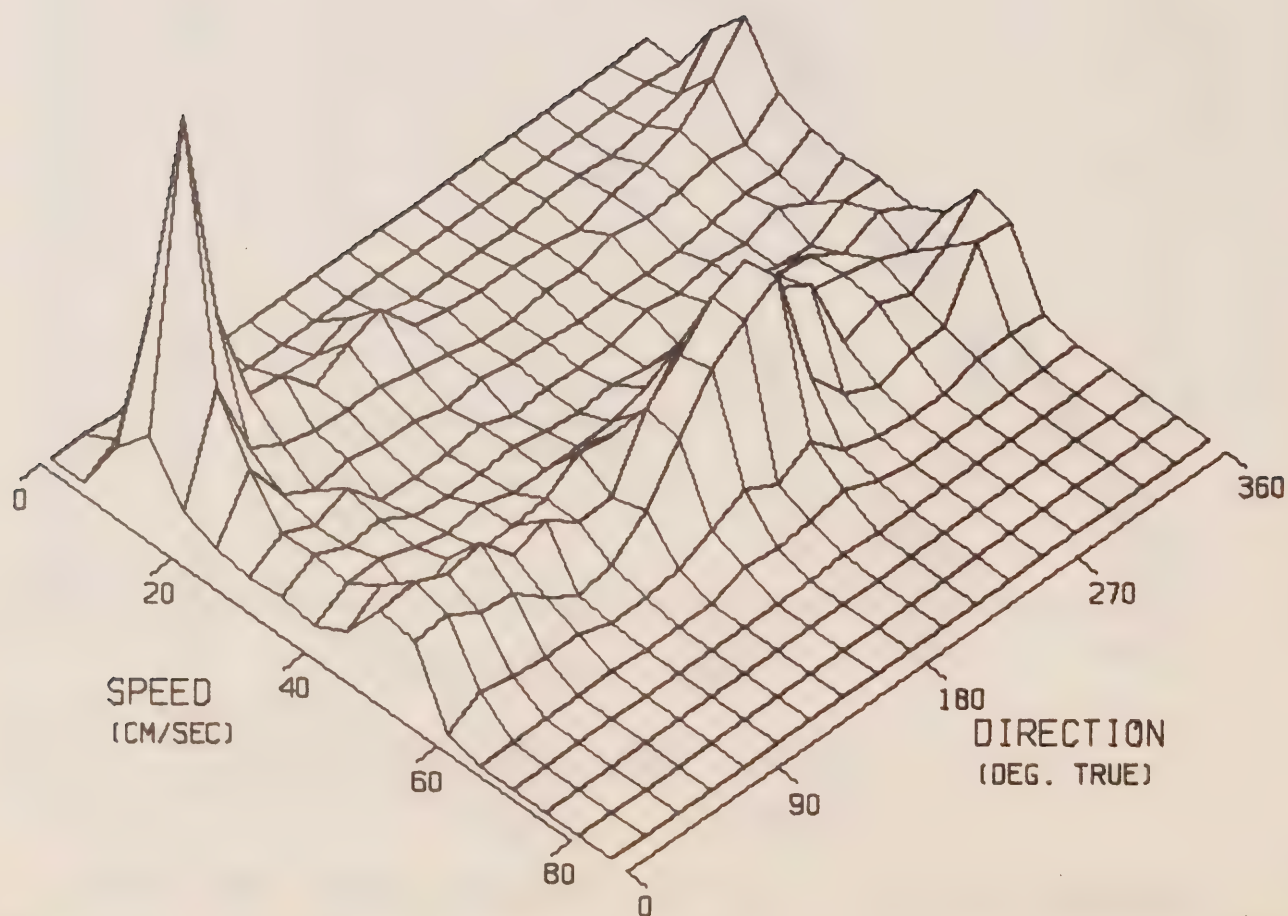
STARTING DATE: 5/ 2/73      ENDING DATE: 26/ 2/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    7 M.

STARTING DATE: 5/ 2/73

NO. OF SAMPLES = 3000



STN. NO. HS-55 DEPTH 7 M.

STARTING DATE: 5/ 2/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	005	057	053	015	013	019	041	014					217
15- 29	008	138	094	033	025	026	048	012					384
30- 44	014	080	042	019	019	012	038	011					235
45- 59	007	041	019	019	016	015	042	010					169
60- 74	004	011	015	013	011	018	030	008					110
75- 89	003	022	017	007	007	016	016	004	001				93
90-104	001	013	012	008	008	019	021	001					83
105-119		006	010	004	004	008	013	002					47
120-134		019	018	009	003	017	010	002					78
135-149		021	010	004	005	023	023	005					91
150-164		006	008	001	005	018	053	019					110
165-179		004	003	004	003	020	057	023	001				115
180-194		001	003	003	002	025	076	021	003				134
195-209		003	001	001	003	036	082	022	003				151
210-224		001	003		005	034	098	023	004				168
225-239		004		001	001	046	072	018	002				144
240-254		001	002	004	009	052	047	005					120
255-269		002	005	003	008	032	031	002					83
270-284		006	003	003	010	028	013						63
285-299		004	005	003	006	029	007	001					55
300-314		003	009	008	007	020	018	001					66
315-329	001	011	010	009	007	017	013	002					70
330-344	001	021	006	002	016	017	024	013					100
345-359	003	021	008	010	007	018	033	014					114
	47		356		200		906		14		0		3000
		496		183		565		233		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 7M. START DATE 05/02/73

MEDIAN (MM/S)	FREQNCY NO.	PCT	60	120	180	240	300
9	0	0	.	.	.	.	.
27	7	0	*				
45	11	0	**				
63	23	1	*****				
81	36	1	*****				
99	64	2	*****				
117	131	4	*****				
135	133	4	*****				
153	138	5	*****				
171	153	5	*****				
189	81	3	*****				
207	62	2	*****				
225	48	2	*****				
243	37	1	*****				
261	54	2	*****				
279	38	1	*****				
297	40	1	*****				
315	32	1	*****				
333	28	1	*****				
351	51	2	*****				
369	43	1	*****				
387	72	2	*****				
405	80	3	*****				
423	102	3	*****				
441	119	4	*****				
459	149	5	*****				
477	190	6	*****				
495	213	7	*****				
513	214	7	*****				
531	236	8	*****				
549	168	6	*****				
567	111	4	*****				
585	61	2	*****				
603	39	1	*****				
621	15	1	**				
639	13	0	**				
657	6	0	*				
675	2	0					
693	0	0					
711	0	0					

NO. OF SAMPLES OVER 720 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 7M. START DATE 05/02/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	60	120	180	240	300
5	141	5	*****				
15	215	7	*****				
25	267	9	*****				
35	153	5	*****				
45	122	4	*****				
55	119	4	*****				
65	69	2	*****				
75	65	2	*****				
85	61	2	*****				
95	61	2	*****				
105	32	1	*****				
115	35	1	*****				
125	55	2	*****				
135	68	2	*****				
145	51	2	*****				
155	76	3	*****				
165	66	2	*****				
175	89	3	*****				
185	78	3	*****				
195	109	4	*****				
205	96	3	*****				
215	118	4	*****				
225	110	4	*****				
235	83	3	*****				
245	81	3	*****				
255	67	2	*****				
265	53	2	*****				
275	48	2	*****				
285	29	1	*****				
295	38	1	*****				
305	48	2	*****				
315	43	1	*****				
325	49	2	*****				
335	63	2	*****				
345	76	3	*****				
355	66	2	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5S DEPTH 7M, START DATE 05/02/73

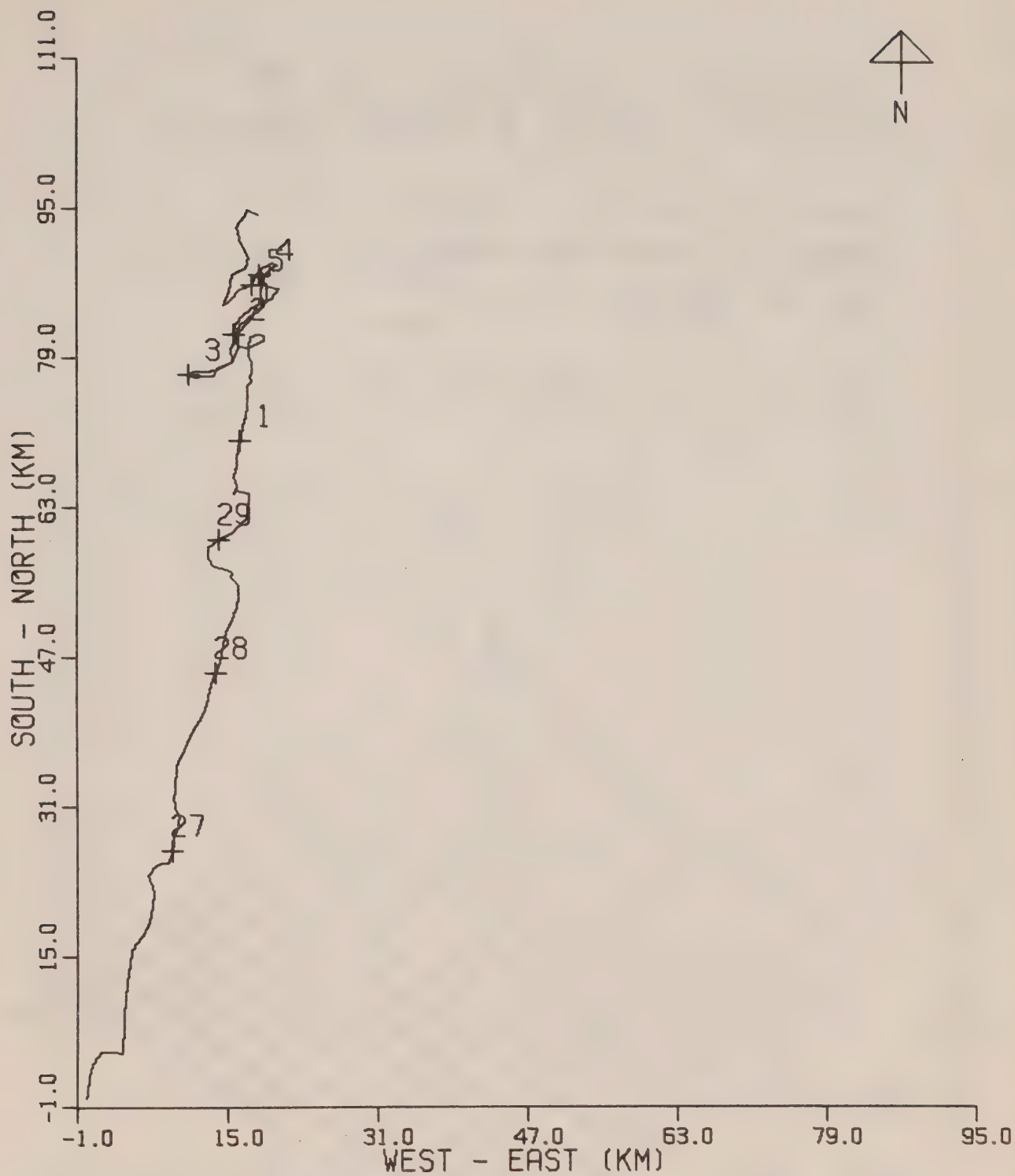
MEDIAN (DEG.C)	FREQUNCY NO.	PCT	100	200	300	400	500
5.92	0	0	.	.	.	.	.
5.96	0	0					
6.00	1	0					
6.04	0	0					
6.08	2	0					
6.12	9	0	*				
6.16	41	1	*****				
6.20	48	2	*****				
6.24	44	1	*****				
6.28	72	2	*****				
6.32	119	4	*****				
6.36	478	16	*****				
6.40	274	9	*****				
6.44	201	7	*****				
6.48	162	5	*****				
6.52	218	7	*****				
6.56	181	6	*****				
6.60	355	12	*****				
6.64	114	4	*****				
6.68	86	3	*****				
6.72	56	2	*****				
6.76	80	3	*****				
6.80	89	3	*****				
6.84	23	1	**				
6.88	25	1	***				
6.92	59	2	*****				
6.96	63	2	*****				
7.00	138	5	*****				
7.04	46	2	*****				
7.08	9	0	*				
7.12	7	0	*				
7.16	0	0					
7.20	0	0					
7.24	0	0					
7.28	0	0					
7.32	0	0					
7.36	0	0					
7.40	0	0					
7.44	0	0					
7.48	0	0					

NO. OF SAMPLES OVER 7.50 = 0

NO. OF SAMPLES UNDER 5.90 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 7 M.

STARTING DATE: 26/ 2/73      ENDING DATE: 5/ 3/73

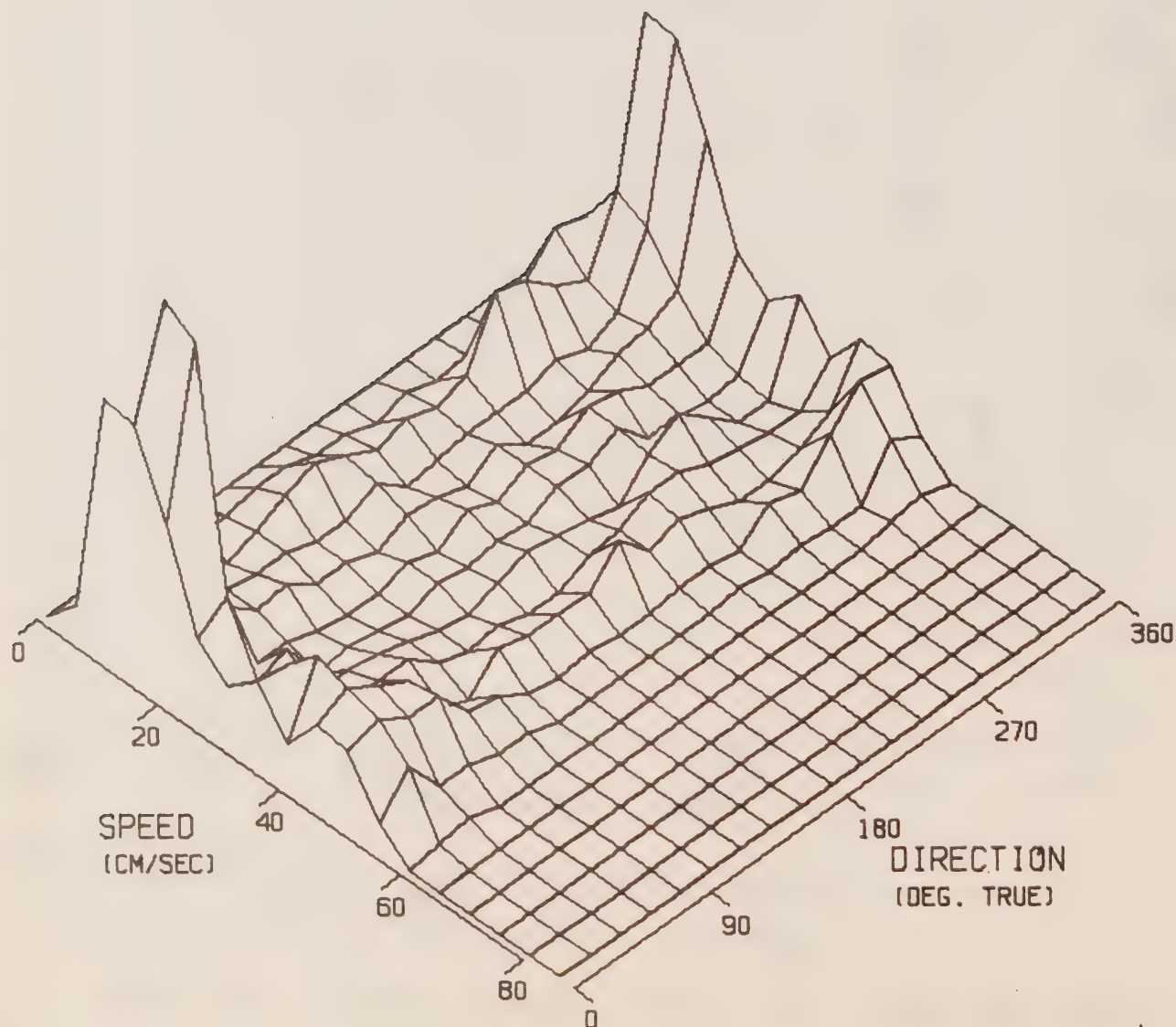


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 7 M.

STARTING DATE: 26/ 2/73

NO. OF SAMPLES = 1217



STN. NO. HS-58 DEPTH 7 M.

STARTING DATE: 26/ 2/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

DIR	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	007	073	059	021	017	021	015	001					214
15- 29	005	057	069	017	021	019	017	004					209
30- 44	004	019	015	012	002	018	013	001					84
45- 59	003	016	006	003	007	015	008	002					60
60- 74	004	005	007	003	002	011	013						45
75- 89	003	004	005	002	007	006	005	001					33
90-104	003	004	002	001	006	002	006						24
105-119	003	008	003		002	004							20
120-134	001	005	002			005	001						14
135-149	005	006		003		004							18
150-164	001	010	002	001	002	005							21
165-179	002	003	003		002	003	001						14
180-194	002	001	001	004	004	003							15
195-209		006		001	004	008							19
210-224	002	005	004	006	001	006							24
225-239			002	003	003	009	002						19
240-254		011	003	005	005	006	001						31
255-269	001	013	002	006	010	004							36
270-284	001	018	006	006	011	001	004	001					48
285-299	005	003	005	001	007	002	003						26
300-314	004	008	003	002	003	004	003						27
315-329	013	008	007	001	001		006	001					37
330-344	007	021	011	003	001	004	019	002					68
345-359	006	044	014	006	007	018	013	003					111
	82		231		125		130		0		0		1217
		348		107		178		16		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 7M. START DATE 26/02/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	30	60	90	120	150
8	0 0	.	.	.	.	.
24	1 0					
40	19 2	*****				
56	38 3	*****				
72	24 2	*****				
88	52 4	*****				
104	91 7	*****				
120	87 7	*****				
136	64 5	*****				
152	54 4	*****				
168	54 4	*****				
184	60 5	*****				
200	52 4	*****				
216	43 4	*****				
232	31 3	*****				
248	21 2	*****				
264	25 2	*****				
280	15 1	*****				
296	18 1	*****				
312	19 2	*****				
328	27 2	*****				
344	21 2	*****				
360	32 3	*****				
376	27 2	*****				
392	26 2	*****				
408	23 2	*****				
424	41 3	*****				
440	44 4	*****				
456	30 2	*****				
472	32 3	*****				
488	28 2	*****				
504	34 3	*****				
520	43 4	*****				
536	15 1	*****				
552	14 1	*****				
568	6 0	**				
584	2 0	*				
600	1 0					
616	3 0	*				
632	0 0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1217  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5S DEPTH 7M. -START DATE 26/02/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	148	12	*****				
15	162	13	*****				
25	124	10	*****				
35	51	4	*****				
45	51	4	*****				
55	32	3	*****				
65	38	3	*****				
75	19	2	****				
85	23	2	*****				
95	17	1	***				
105	10	1	**				
115	14	1	***				
125	10	1	**				
135	9	1	**				
145	16	1	***				
155	9	1	**				
165	15	1	***				
175	8	1	**				
185	13	1	***				
195	12	1	**				
205	12	1	**				
215	11	1	**				
225	19	2	*****				
235	10	1	**				
245	19	2	*****				
255	23	2	*****				
265	28	2	*****				
275	40	3	*****				
285	11	1	**				
295	20	2	****				
305	19	2	****				
315	29	2	*****				
325	21	2	****				
335	36	3	*****				
345	60	5	*****				
355	78	6	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1217  
 SAMPLE INTERVAL = 10 MINUTES

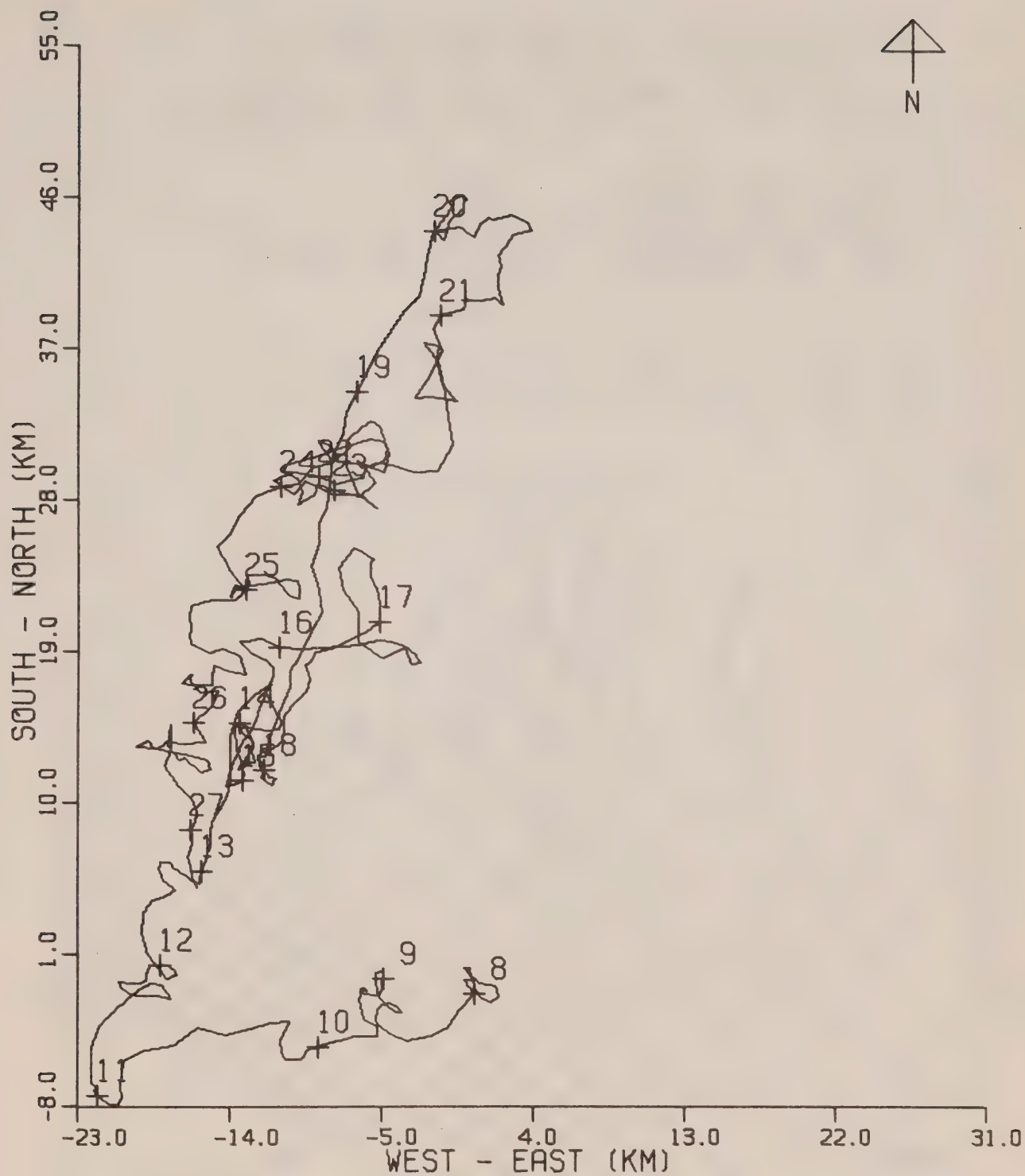


## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5S DEPTH 7M, START DATE 26/02/73

MEDIAN (DEG.C)	FREQ NO.	PCT	160	320	480	640	800
6.21	0	0	.	.	.	.	.
6.23	0	0					
6.25	0	0					
6.27	0	0					
6.29	0	0					
6.31	0	0					
6.33	0	0					
6.35	0	0					
6.37	0	0					
6.39	0	0					
6.41	0	0					
6.43	0	0					
6.45	0	0					
6.47	0	0					
6.49	0	0					
6.51	18	1	*				
6.53	0	0					
6.55	32	3	**				
6.57	0	0					
6.59	28	2	**				
6.61	147	12	*****				
6.63	0	0					
6.65	355	29	*****				
6.67	0	0					
6.69	583	48	*****				
6.71	45	4	***				
6.73	0	0					
6.75	9	1	*				
6.77	0	0					
6.79	0	0					
6.81	0	0					
6.83	0	0					
6.85	0	0					
6.87	0	0					
6.89	0	0					
6.91	0	0					
6.93	0	0					
6.95	0	0					
6.97	0	0					
6.99	0	0					

NO. OF SAMPLES OVER 7.00 = 0  
 NO. OF SAMPLES UNDER 6.20 = 0  
 TOTAL NO. OF OBSERVATIONS = 1217  
 SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 7 M.

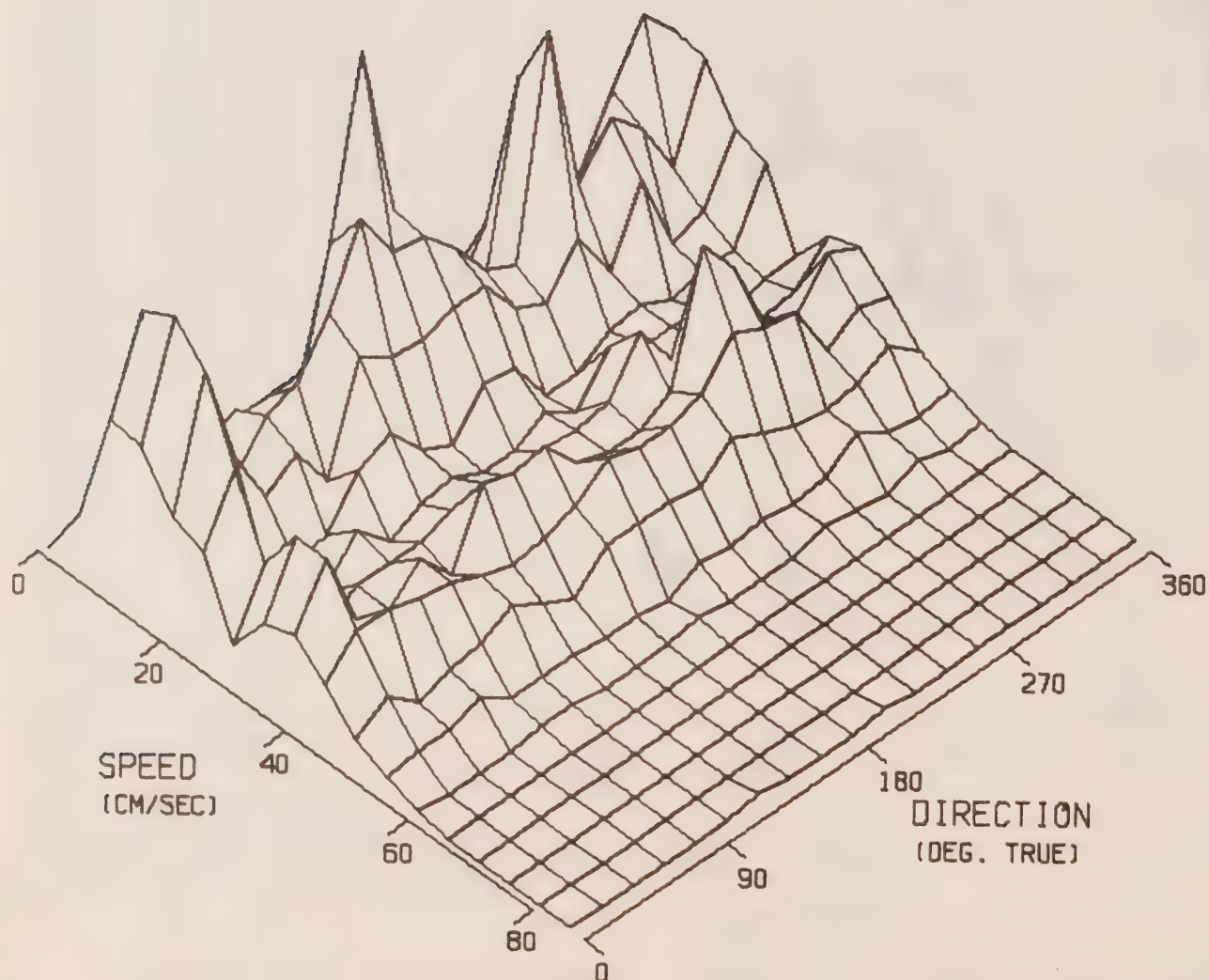
STARTING DATE: 7/ 3/73      ENDING DATE: 27/ 3/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    7 M.

STARTING DATE: 7/ 3/73

NO. OF SAMPLES = 2875



STN. NO. HS-58 DEPTH 7 M.

STARTING DATE: 7/ 3/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

DIR	000 TO 079	080 TO 159	160 TO 239	240 TO 319	320 TO 399	400 TO 479	480 TO 559	560 TO 639	640 TO 719	720 TO 799	800 TO 879	880 TO 959	
0- 14	009	044	036	015	023	015	009						151
15- 29	006	061	061	028	034	026	011	001					228
30- 44	007	034	033	013	012	020	003						122
45- 59		022	013	006	012	018	010	001					82
60- 74	002	019	013	009	007	013	008	001					72
75- 89	003	027	021	011	015	022	006	001					106
90-104	001	017	017	010	013	009	008	001					76
105-119	002	021	021	016	013	019	005	001		001			99
120-134	001	030	040	016	011	016	006						120
135-149	007	046	026	013	023	016	005						136
150-164	014	068	031	005	014	022	006						160
165-179	011	054	023	017	021	023	007						156
180-194	003	039	025	011	010	014	007	001					110
195-209	002	027	026	012	013	020	010			001			111
210-224	003	027	017	007	009	013	009						85
225-239	001	014	013	008	018	026	010						90
240-254	003	021	017	015	025	018	009	001					109
255-269	012	060	043	012	022	037	008	002					196
270-284	012	032	018	013	018	031	009	001					134
285-299	002	030	023	011	018	023	009	001					117
300-314	006	032	025	009	011	019	005	003					110
315-329	006	030	010	009	008	011	008	001					83
330-344	010	034	018	005	014	019	009						109
345-359	007	037	015	016	014	017	006	001					113
	130	585		378		183		0	0	2			2875
	826		287		467		17		0		0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 7M, START DATE 07/03/73

MEDIAN (MM/S)	FREQINCY NO. PCT .	50 .	100 .	150 .	200 .	250 .
8	0 0					
24	6 0	*				
40	22 1	****				
56	30 1	*****				
72	72 3	*****				
88	133 5	*****				
104	152 5	*****				
120	210 7	*****				
136	164 6	*****				
152	167 6	*****				
168	157 5	*****				
184	139 5	*****				
200	114 4	*****				
216	115 4	*****				
232	85 3	*****				
248	37 1	*****				
264	66 2	*****				
280	58 2	*****				
296	49 2	*****				
312	52 2	*****				
328	67 2	*****				
344	69 2	*****				
360	75 3	*****				
376	95 3	*****				
392	91 3	*****				
408	67 2	*****				
424	109 4	*****				
440	120 4	*****				
456	89 3	*****				
472	63 2	*****				
488	75 3	*****				
504	40 1	*****				
520	30 1	*****				
536	29 1	*****				
552	11 0	**				
568	6 0	*				
584	8 0	**				
600	0 0					
616	1 0					
632	0 0					

NO. OF SAMPLES OVER 640 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2875  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 7M. START DATE 07/03/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	30	60	90	120	150
5	104	4	*****				
15	141	5	*****				
25	145	5	*****				
35	86	3	*****				
45	60	2	*****				
55	51	2	*****				
65	51	2	*****				
75	55	2	*****				
85	75	3	*****				
95	49	2	*****				
105	57	2	*****				
115	73	3	*****				
125	79	3	*****				
135	76	3	*****				
145	104	4	*****				
155	104	4	*****				
165	103	4	*****				
175	103	4	*****				
185	68	2	*****				
195	77	3	*****				
205	73	3	*****				
215	62	2	*****				
225	53	2	*****				
235	60	2	*****				
245	70	2	*****				
255	106	4	*****				
265	135	5	*****				
275	88	3	*****				
285	74	3	*****				
295	83	3	*****				
305	69	2	*****				
315	71	2	*****				
325	53	2	*****				
335	75	3	*****				
345	70	2	*****				
355	72	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

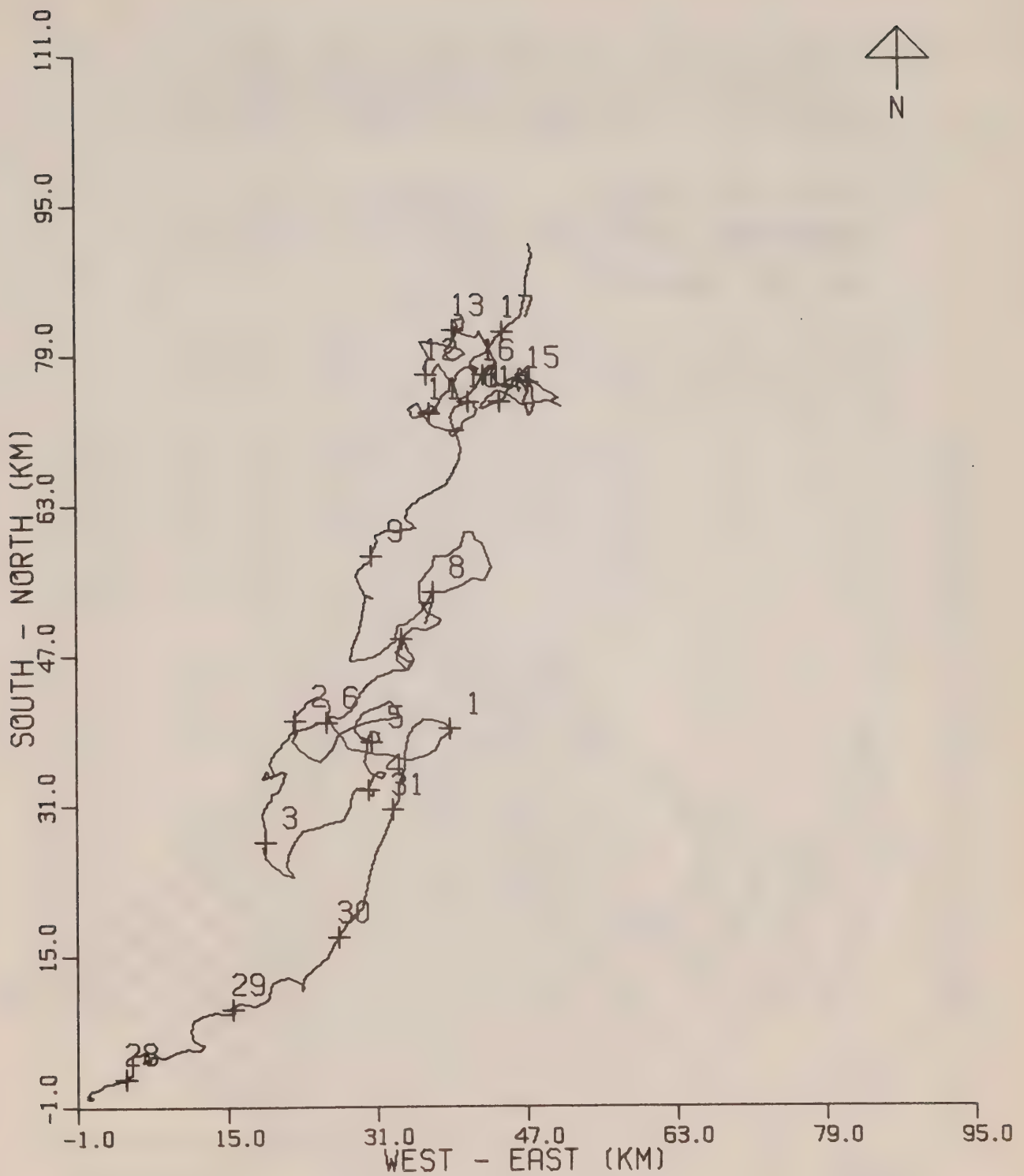
NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2875  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-55 DEPTH 7M. START DATE 07/03/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT .	120 .	240 .	360 .	480 .	600 .
6.51	0	0					
6.53	0	0					
6.55	0	0					
6.57	0	0					
6.59	0	0					
6.61	0	0					
6.63	0	0					
6.65	0	0					
6.67	0	0					
6.69	230	8	*****				
6.71	219	8	*****				
6.73	0	0					
6.75	95	3	*****				
6.77	0	0					
6.79	137	5	*****				
6.81	150	5	*****				
6.83	0	0					
6.85	226	8	*****				
6.87	0	0					
6.89	294	10	*****				
6.91	406	14	*****				
6.93	0	0					
6.95	364	13	*****				
6.97	0	0					
6.99	349	12	*****				
7.01	208	7	*****				
7.03	0	0					
7.05	138	5	*****				
7.07	0	0					
7.09	43	1	****				
7.11	13	0	*				
7.13	0	0					
7.15	2	0					
7.17	0	0					
7.19	0	0					
7.21	0	0					
7.23	0	0					
7.25	1	0					
7.27	0	0					
7.29	0	0					

NO. OF SAMPLES OVER 7.30 = 0  
 NO. OF SAMPLES UNDER 6.50 = 0  
 TOTAL NO. OF OBSERVATIONS = 2875  
 SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

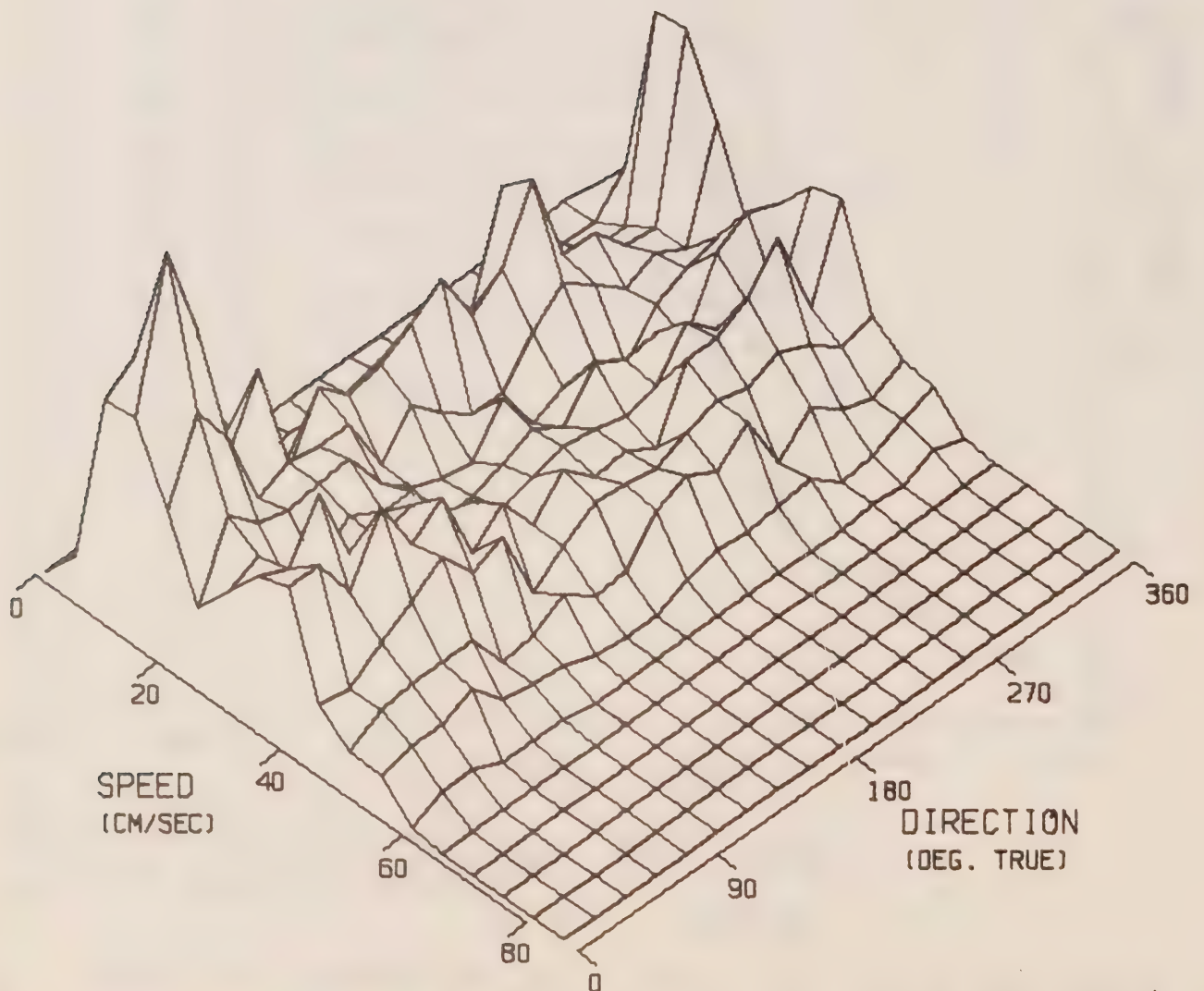
DEPTH 7 M.

STARTING DATE: 27/ 3/73      ENDING DATE: 17/ 4/73



# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    7 M.  
STARTING DATE: 27/ 3/73  
NO. OF SAMPLES = 3000



STN. NO. HS-58      DEPTH    7 M.  
 STARTING DATE: 27/ 3/73  
 SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
 AND SPEED (MM/SEC).

SPEED													
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	006	059	050	025	038	023	009	004					214
15- 29	009	083	070	030	038	022	014	006					272
30- 44	008	094	045	027	026	022	015	005					242
45- 59	003	043	019	023	042	030	010	004					174
60- 74	002	037	027	016	030	037	015	005					169
75- 89	001	037	024	028	029	020	014	001					154
90-104	001	018	028	028	030	025	006	002					138
105-119		015	023	017	025	026	005	001					112
120-134		018	031	014	017	015	006						101
135-149	002	018	012	008	014	015	004						73
150-164	001	021	013	006	011	015	004						71
165-179	001	027	019	008	008	011	004						78
180-194	002	015	011	013	020	021	003						85
195-209		020	011	015	015	015	014						90
210-224	001	016	010	006	014	015	011						73
225-239	001	019	016	016	014	018	012	001					97
240-254	001	023	012	013	008	016	014	001					88
255-269	001	056	022	016	018	026	016						155
270-284		019	015	010	021	020	009	001					95
285-299		021	016	010	027	023	008	001					106
300-314		007	014	018	022	024	006	001					92
315-329	001	006	013	022	020	030	007						99
330-344	001	007	011	020	021	015	008	004					87
345-359	004	035	013	033	027	015	006	002					135
	46		525		535		220		0		0		3000
		714		422		499		39		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-59 DEPTH 7M, START DATE 27/03/73

MEDIAN (MM/S)	FREQUENCY NO. PCT .	50 .	100 .	150 .	200 .	250 .
8	0 0					
24	1 0					
40	4 0	*				
56	14 0	***				
72	27 1	*****				
88	93 3	*****				
104	121 4	*****				
120	171 6	*****				
136	169 6	*****				
152	160 5	*****				
168	125 4	*****				
184	140 5	*****				
200	99 3	*****				
216	93 3	*****				
232	87 3	*****				
248	61 2	*****				
264	83 3	*****				
280	86 3	*****				
296	84 3	*****				
312	89 3	*****				
328	108 4	*****				
344	116 4	*****				
360	107 4	*****				
376	113 4	*****				
392	112 4	*****				
408	83 3	*****				
424	128 4	*****				
440	99 3	*****				
456	94 3	*****				
472	74 2	*****				
488	71 2	*****				
504	70 2	*****				
520	28 1	*****				
536	31 1	*****				
552	25 1	*****				
568	18 1	****				
584	10 0	**				
600	5 0	*				
616	1 0					
632	0 0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 7M. START DATE 27/03/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	167	6	*****				
15	144	5	*****				
25	192	6	*****				
35	160	5	*****				
45	144	5	*****				
55	109	4	*****				
65	108	4	*****				
75	113	4	*****				
85	102	3	*****				
95	90	3	*****				
105	80	3	*****				
115	72	2	*****				
125	71	2	*****				
135	60	2	*****				
145	43	1	*****				
155	39	1	*****				
165	56	2	*****				
175	56	2	*****				
185	56	2	*****				
195	47	2	*****				
205	75	3	*****				
215	38	1	*****				
225	63	2	*****				
235	62	2	*****				
245	60	2	*****				
255	80	3	*****				
265	105	4	*****				
275	60	2	*****				
285	71	2	*****				
295	69	2	*****				
305	58	2	*****				
315	67	2	*****				
325	71	2	*****				
335	48	2	*****				
345	70	2	*****				
355	94	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-55 DEPTH 7M. START DATE 27/03/73

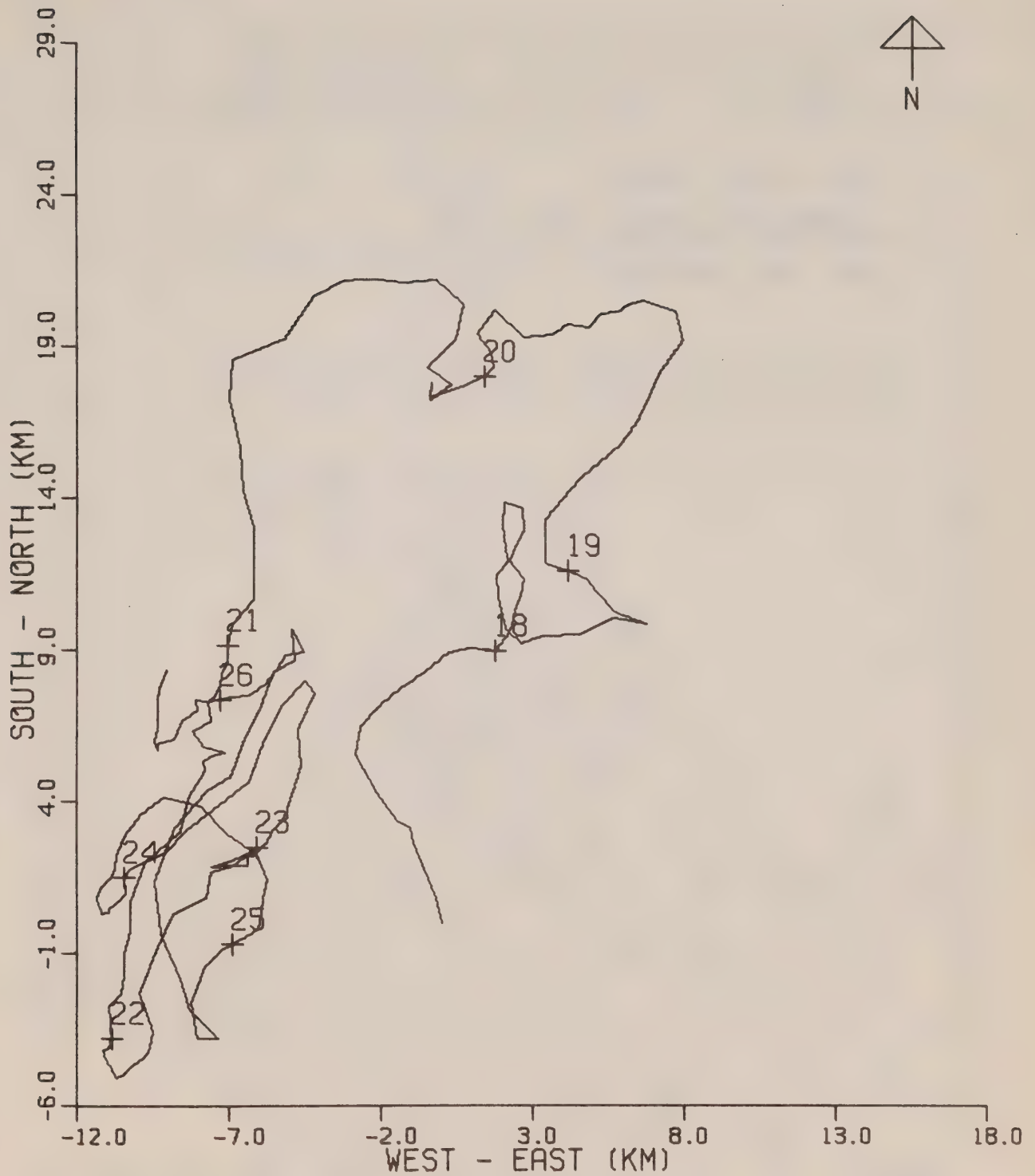
MEDIAN (DEG.C)	FREQUENCY NO.	PCT	100	200	300	400	500
6.88	10	0	*				
6.94	64	2	*****				
7.00	327	11	*****				
7.06	25	1	***				
7.12	3	0					
7.18	85	3	*****				
7.24	93	3	*****				
7.30	71	2	*****				
7.36	203	7	*****				
7.42	89	3	*****				
7.48	284	9	*****				
7.54	447	15	*****				
7.60	357	12	*****				
7.66	297	10	*****				
7.72	97	3	*****				
7.78	106	4	*****				
7.84	55	2	*****				
7.90	44	1	***				
7.96	14	0	*				
8.02	16	1	**				
8.08	25	1	***				
8.14	13	0	*				
8.20	13	0	*				
8.26	22	1	**				
8.32	8	0	*				
8.38	20	1	**				
8.44	23	1	**				
8.50	25	1	***				
8.56	14	0	*				
8.62	7	0	*				
8.68	12	0	*				
8.74	8	0	*				
8.80	26	1	***				
8.86	30	1	***				
8.92	11	0	*				
8.98	26	1	***				
9.04	11	0	*				
9.10	8	0	*				
9.16	7	0	*				
9.22	0	0					

NO. OF SAMPLES OVER 9.25 = 4

NO. OF SAMPLES UNDER 6.85 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 7 M.

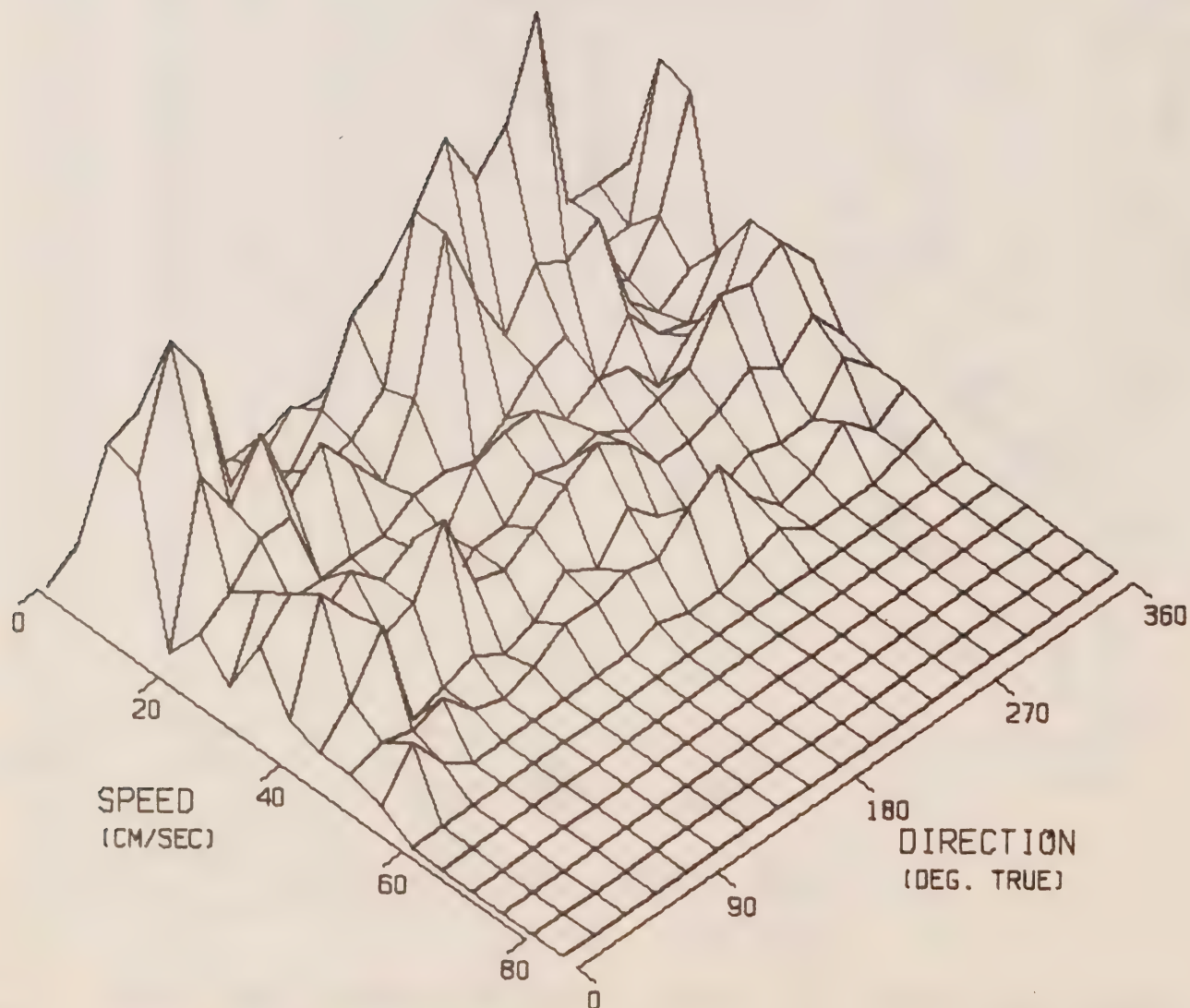
STARTING DATE: 17/ 4/73    ENDING DATE: 26/ 4/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH    7 M.

STARTING DATE: 17/ 4/73

NO. OF SAMPLES = 1331



STN. NO. HS-55 DEPTH 7 M.

STARTING DATE: 17/ 4/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	006	025	008	004	004	007	005						59
15- 29	009	032	023	014	016	011	008	001					114
30- 44	007	028	018	008	010	013	004						88
45- 59	002	021	022	010	012	004	003						74
60- 74	001	012	014	009	011	002	003						52
75- 89		007	009		008	004							28
90-104		003	011	002	010	007							33
105-119	001	001	007	002	011	001							23
120-134		005	008	003	005		001						22
135-149	005	009	003	004	003	003	003						30
150-164	002	013	014	008	010	004	001						52
165-179	006	026	015	011	009	006	002						75
180-194	002	026	021	007	005	005	005						71
195-209	001	024	020	008	012	008	001						74
210-224	001	014	014	014	011	006	004						64
225-239	003	017	018	007	006	005	003						59
240-254	008	022	015	011	005	002	005						68
255-269	002	040	022	003	008	002	004						81
270-284		013	021	008	007	005	001						55
285-299	001	004	007	009	010	004							35
300-314	001	004	009	004	014	007	001						40
315-329	006	002	003	006	009	002	003						31
330-344	005	002	006	010	017	008	001	001					50
345-359	003	020	002	008	015	004	001						53
	72		310		228		59		0		0		1331
		370		170		120		2		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 7M. START DATE 17/04/73

MEDIAN (MM/S)	FREQUENCY		20	40	60	80	100
	NO.	PCT .	.	.	.	.	.
7	0	0					
21	6	0	***				
35	7	1	*****				
49	17	1	*****				
63	24	2	*****				
77	30	2	*****				
91	63	5	*****				
105	51	4	*****				
119	77	6	*****				
133	66	5	*****				
147	76	6	*****				
161	76	6	*****				
175	53	4	*****				
189	64	5	*****				
203	44	3	*****				
217	67	5	*****				
231	31	2	*****				
245	23	2	*****				
259	44	3	*****				
273	18	1	*****				
287	38	3	*****				
301	18	1	*****				
315	52	4	*****				
329	38	3	*****				
343	24	2	*****				
357	45	3	*****				
371	43	3	*****				
385	44	3	*****				
399	28	2	*****				
413	29	2	*****				
427	24	2	*****				
441	14	1	*****				
455	22	2	*****				
469	8	1	****				
483	21	2	*****				
497	15	1	*****				
511	13	1	*****				
525	7	1	****				
539	3	0	**				
553	8	1	****				

NO. OF SAMPLES OVER 560 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1331  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 7M. START DATE 17/04/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	20	40	60	80	100
5	42	3	*****				
15	67	5	*****				
25	66	5	*****				
35	63	5	*****				
45	53	4	*****				
55	48	4	*****				
65	35	3	*****				
75	23	2	*****				
85	18	1	*****				
95	26	2	*****				
105	18	1	*****				
115	13	1	*****				
125	18	1	*****				
135	9	1	*****				
145	33	2	*****				
155	26	2	*****				
165	39	3	*****				
175	57	4	*****				
185	48	4	*****				
195	52	4	*****				
205	45	3	*****				
215	40	3	*****				
225	38	3	*****				
235	42	3	*****				
245	56	4	*****				
255	45	3	*****				
265	53	4	*****				
275	37	3	*****				
285	25	2	*****				
295	23	2	*****				
305	23	2	*****				
315	30	2	*****				
325	18	1	*****				
335	32	2	*****				
345	39	3	*****				
355	31	2	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1331  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-58 DEPTH 7M. START DATE 17/04/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	30	60	90	120	150
7.33	0	0	.	.	.	.	.
7.39	0	0					
7.45	0	0					
7.51	0	0					
7.57	0	0					
7.63	1	0					
7.69	2	0	*				
7.75	5	0	**				
7.81	4	0	*				
7.87	8	1	***				
7.93	32	2	*****				
7.99	53	4	*****				
8.05	19	1	*****				
8.11	74	6	*****				
8.17	55	4	*****				
8.23	73	5	*****				
8.29	59	4	*****				
8.35	31	2	*****				
8.41	52	4	*****				
8.47	55	4	*****				
8.53	51	4	*****				
8.59	41	3	*****				
8.65	29	2	*****				
8.71	76	6	*****				
8.77	60	5	*****				
8.83	78	6	*****				
8.89	67	5	*****				
8.95	43	3	*****				
9.01	65	5	*****				
9.07	94	7	*****				
9.13	143	11	*****				
9.19	43	3	*****				
9.25	13	1	***				
9.31	5	0	**				
9.37	0	0					
9.43	0	0					
9.49	0	0					
9.55	0	0					
9.61	0	0					
9.67	0	0					

NO. OF SAMPLES OVER 9.70 = 0

NO. OF SAMPLES UNDER 7.30 = 0

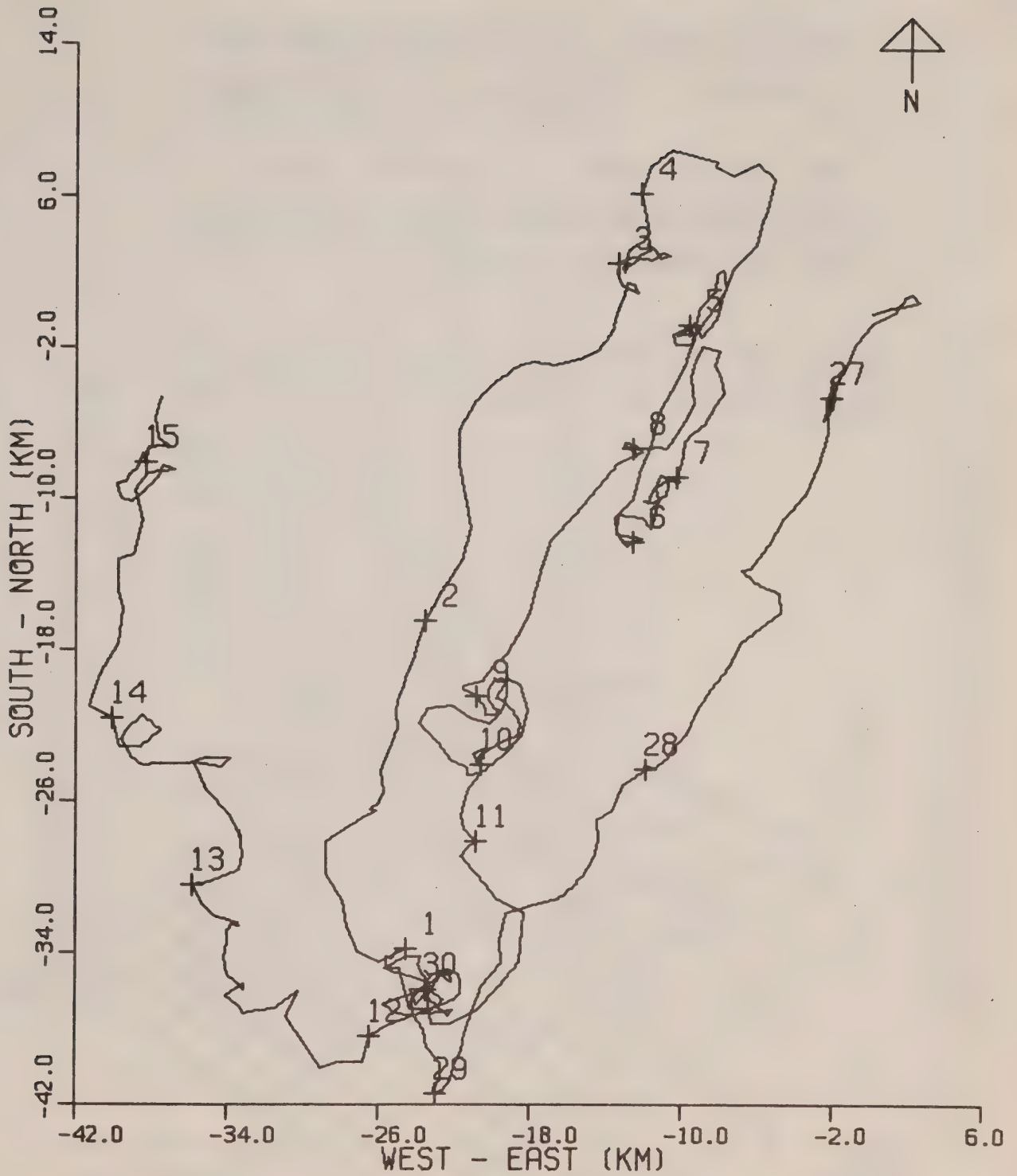
TOTAL NO. OF OBSERVATIONS = 1331

SAMPLE INTERVAL = 10 MINUTES

DATA FOR 10-METRE DEPTH







STN. NO. HS-5N

DEPTH 10 M.

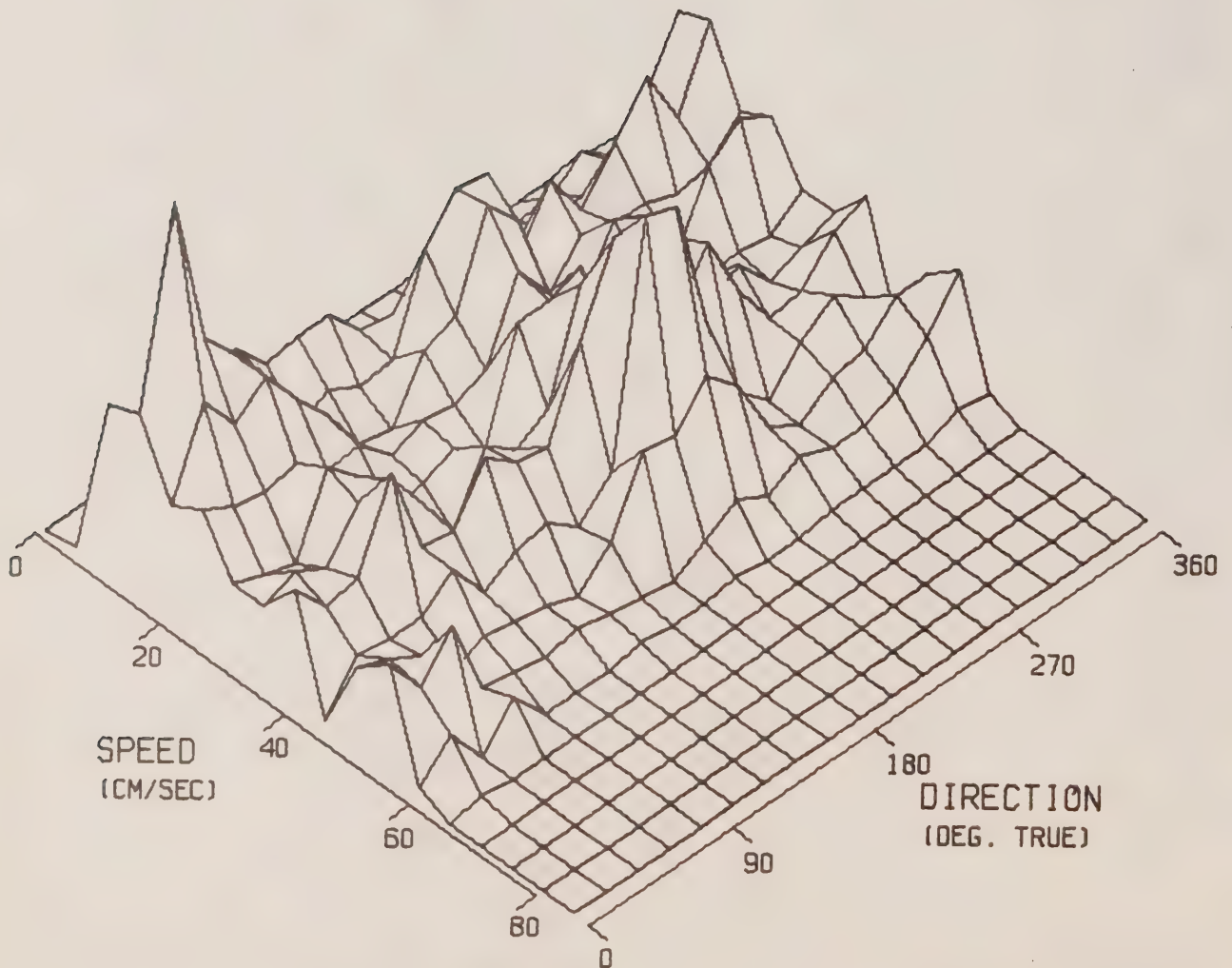
STARTING DATE: 26/ 4/73    ENDING DATE: 15/ 5/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 26/ 4/73

NO. OF SAMPLES = 2720



STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 26/ 4/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	003	035	028	024	018	015	020	005					148
15- 29	005	055	039	013	019	011	015	007					164
30- 44	005	031	031	011	010	013	019	002					122
45- 59		035	029	023	029	012	006	005					139
60- 74	002	027	032	021	021	019	005	003					130
75- 89	002	036	017	017	017	014	005	001					109
90-104	001	014	015	016	010	012	003	001					72
105-119	002	020	011	010	012	009	002	001					67
120-134	004	018	009	008	009	016	004						68
135-149	006	018	011	010	021	013	003	001					83
150-164		010	012	012	012	005	003						54
165-179		017	024	015	021	014	010						101
180-194	002	022	027	021	026	035	011						144
195-209		013	041	034	031	056	013	001					189
210-224	001	025	025	029	027	053	016						176
225-239		028	020	019	019	030	020	002					138
240-254	002	016	012	016	024	019	013						102
255-269	003	018	023	018	027	024	007	002					122
270-284	003	012	017	020	019	010	003						84
285-299	002	011	029	010	013	010	008	003					86
300-314	005	013	019	013	018	013	009	002					92
315-329	007	023	016	021	009	013	009	001					99
330-344	005	022	017	016	014	020	018	006					118
345-359		026	019	027	011	010	016	003					112
	60	523	437	238				0	0	0			2719
	545	424	446	46				0	0	0			

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 1



## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M, START DATE 26/04/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	40	80	120	160	200
8	0 0	.	.	.	.	.
24	0 0					
40	5 0	*				
56	18 1	*****				
72	37 1	*****				
88	67 2	*****				
104	97 4	*****				
120	126 5	*****				
136	123 5	*****				
152	132 5	*****				
168	120 4	*****				
184	99 4	*****				
200	106 4	*****				
216	112 4	*****				
232	111 4	*****				
248	67 2	*****				
264	91 3	*****				
280	85 3	*****				
296	95 3	*****				
312	61 2	*****				
328	81 3	*****				
344	94 3	*****				
360	86 3	*****				
376	93 3	*****				
392	111 4	*****				
408	80 3	*****				
424	114 4	*****				
440	77 3	*****				
456	73 3	*****				
472	74 3	*****				
488	57 2	*****				
504	62 2	*****				
520	56 2	*****				
536	40 1	*****				
552	26 1	*****				
568	18 1	*****				
584	18 1	*****				
600	6 0	**				
616	0 0					
632	1 0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2719  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M. START DATE 26/04/73

MEDIAN (DEG.T)	FREQUNCY NO.	PCT	40	80	120	160	200
5	106	4	*****	*****	*****	*****	*****
15	118	4	*****	*****	*****	*****	*****
25	94	3	*****	*****	*****	*****	*****
35	89	3	*****	*****	*****	*****	*****
45	80	3	*****	*****	*****	*****	*****
55	99	4	*****	*****	*****	*****	*****
65	85	3	*****	*****	*****	*****	*****
75	81	3	*****	*****	*****	*****	*****
85	65	2	*****	*****	*****	*****	*****
95	51	2	*****	*****	*****	*****	*****
105	44	2	*****	*****	*****	*****	*****
115	48	2	*****	*****	*****	*****	*****
125	45	2	*****	*****	*****	*****	*****
135	57	2	*****	*****	*****	*****	*****
145	42	2	*****	*****	*****	*****	*****
155	37	1	*****	*****	*****	*****	*****
165	51	2	*****	*****	*****	*****	*****
175	73	3	*****	*****	*****	*****	*****
185	82	3	*****	*****	*****	*****	*****
195	111	4	*****	*****	*****	*****	*****
205	141	5	*****	*****	*****	*****	*****
215	117	4	*****	*****	*****	*****	*****
225	115	4	*****	*****	*****	*****	*****
235	79	3	*****	*****	*****	*****	*****
245	65	2	*****	*****	*****	*****	*****
255	80	3	*****	*****	*****	*****	*****
265	80	3	*****	*****	*****	*****	*****
275	54	2	*****	*****	*****	*****	*****
285	60	2	*****	*****	*****	*****	*****
295	57	2	*****	*****	*****	*****	*****
305	55	2	*****	*****	*****	*****	*****
315	70	3	*****	*****	*****	*****	*****
325	67	2	*****	*****	*****	*****	*****
335	77	3	*****	*****	*****	*****	*****
345	73	3	*****	*****	*****	*****	*****
355	71	3	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2719  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M, START DATE 26/04/73

MEDIAN (DEG.C)	FREQNCY NO.	PCT .	70 .	140 .	210 .	280 .	350 .
7.05	0	0					
7.15	19	1	***				
7.25	289	11	*****				
7.35	177	7	*****				
7.45	125	5	*****				
7.55	140	5	*****				
7.65	108	4	*****				
7.75	108	4	*****				
7.85	91	3	*****				
7.95	94	3	*****				
8.05	97	4	*****				
8.15	113	4	*****				
8.25	166	6	*****				
8.35	120	4	*****				
8.45	115	4	*****				
8.55	141	5	*****				
8.65	99	4	*****				
8.75	98	4	*****				
8.85	110	4	*****				
8.95	56	2	*****				
9.05	66	2	*****				
9.15	36	1	*****				
9.25	55	2	*****				
9.35	66	2	*****				
9.45	25	1	****				
9.55	35	1	*****				
9.65	33	1	*****				
9.75	15	1	**				
9.85	11	0	**				
9.95	17	1	**				
10.05	10	0	*				
10.15	13	0	**				
10.25	10	0	*				
10.35	10	0	*				
10.45	5	0	*				
10.55	14	1	**				
10.65	14	1	**				
10.75	5	0	*				
10.85	8	0	*				
10.95	0	0					

NO. OF SAMPLES OVER 11.00 = 5

NO. OF SAMPLES UNDER 7.00 = 0

TOTAL NO. OF OBSERVATIONS = 2719

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 10M, START DATE 26/04/73

MEDIAN (PPT)	FREQUENCY NO.	PCT	70	140	210	280	350
23.19	0	0	.	.	.	.	.
23.37	2	0					
23.55	6	0	*				
23.73	7	0	*				
23.91	10	0	*				
24.09	9	0	*				
24.27	3	0					
24.45	6	0	*				
24.63	12	0	**				
24.81	9	0	*				
24.99	6	0	*				
25.17	1	0					
25.35	12	0	**				
25.53	10	0	*				
25.71	14	1	**				
25.89	15	1	**				
26.07	18	1	***				
26.25	34	1	*****				
26.43	52	2	*****				
26.61	51	2	*****				
26.79	97	4	*****				
26.97	94	3	*****				
27.15	121	4	*****				
27.33	161	6	*****				
27.51	245	9	*****				
27.69	221	8	*****				
27.87	197	7	*****				
28.05	166	6	*****				
28.23	176	6	*****				
28.41	168	6	*****				
28.59	112	4	*****				
28.77	122	4	*****				
28.95	124	5	*****				
29.13	187	7	*****				
29.31	145	5	*****				
29.49	75	3	*****				
29.67	30	1	***				
29.85	1	0					
30.03	0	0					
30.21	0	0					

NO. OF SAMPLES OVER 30.30 = 0

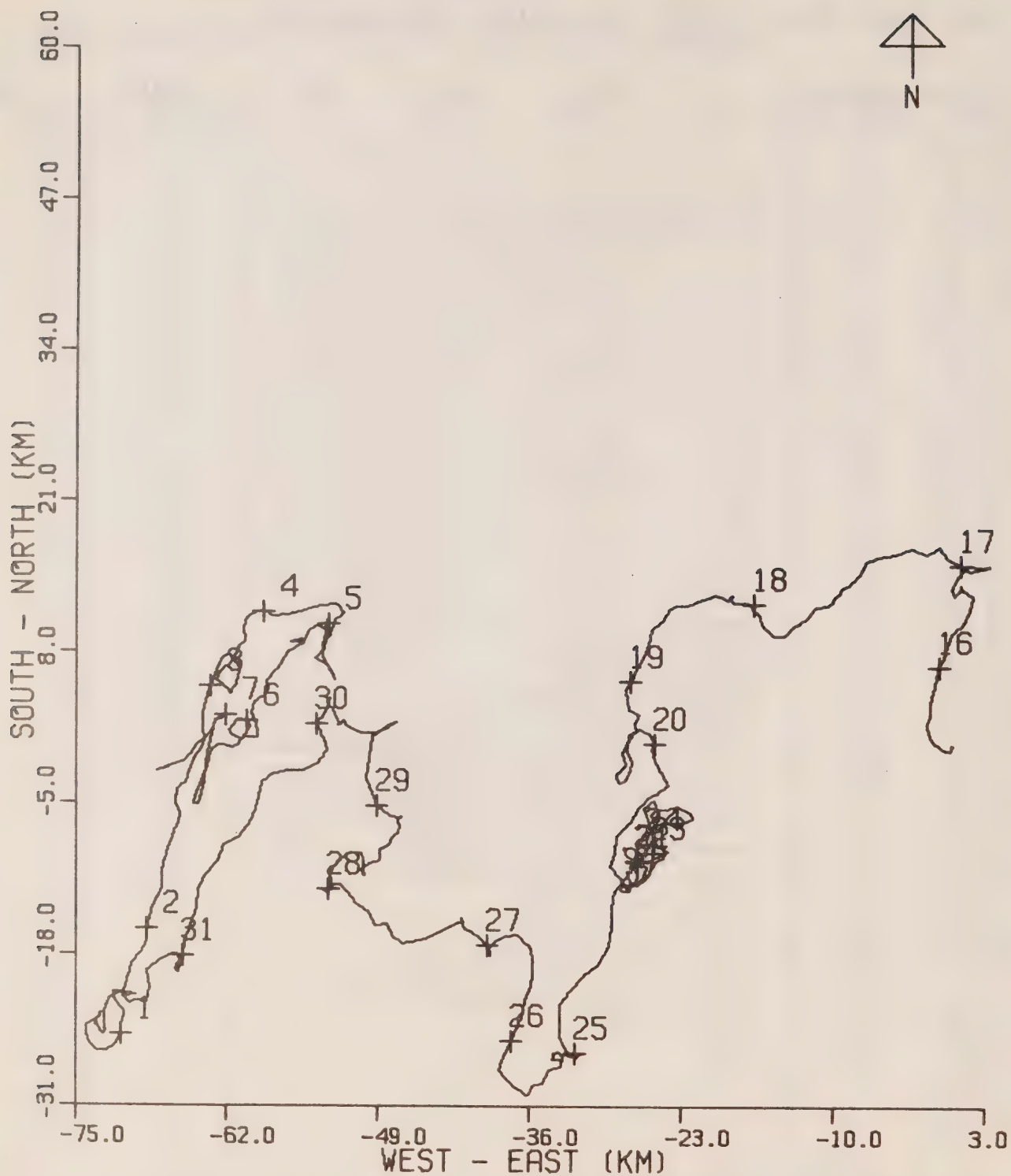
NO. OF SAMPLES UNDER 23.10 = 0

TOTAL NO. OF OBSERVATIONS = 2719

SAMPLE INTERVAL = 10 MINUTES

4 RELEASED.





STN. NO. HS-5N

DEPTH 10 M.

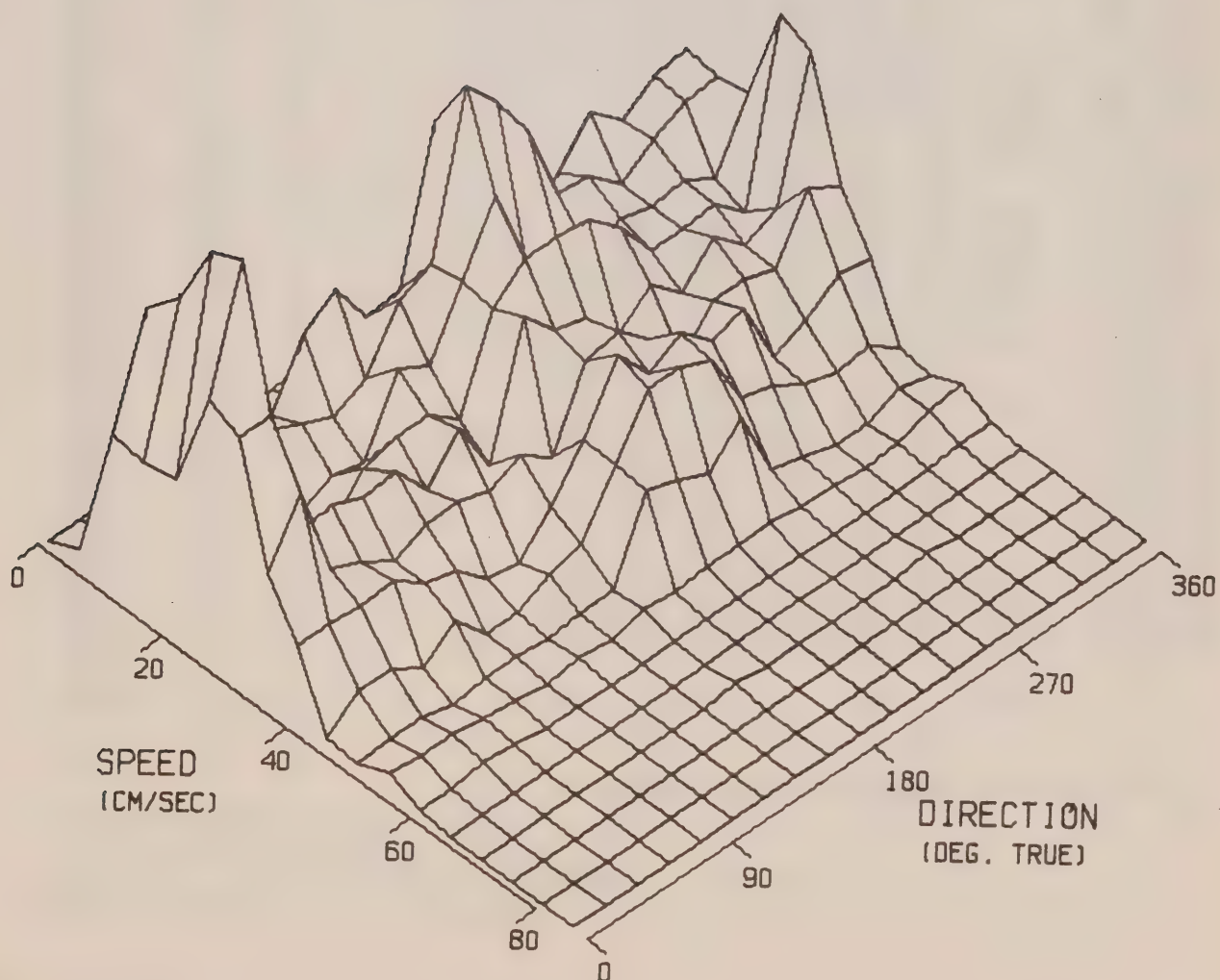
STARTING DATE: 15/ 5/73    ENDING DATE: 7/ 6/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 15/ 5/73

NO. OF SAMPLES = 3337



STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 15/ 5/73

SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14		037	054	069	030	007	003	003					203
15- 29	001	075	086	079	043	012	002	002					300
30- 44		033	029	031	020	010	003	002					128
45- 59		023	020	024	019	011	001	001					99
60- 74	001	024	013	027	014	010	002	001					92
75- 89	001	026	008	018	012	013		001					79
90-104	003	018	013	028	017	003							82
105-119	003	024	011	013	011	002	001						65
120-134		031	009	022	011	003	001						77
135-149	005	025	030	027	011	005							103
150-164	005	020	024	015	015	008		001					88
165-179	004	032	036	020	013	017	010		001				133
180-194	004	040	043	050	019	020	010						186
195-209	001	069	061	035	029	041	010	001					247
210-224		060	036	042	031	035	009						213
225-239	002	037	036	033	031	034	013						186
240-254		031	035	032	025	031	008						162
255-269	001	029	034	026	013	022	003						128
270-284		025	027	023	026	022	003						126
285-299	001	040	025	022	027	013			001				129
300-314		037	024	030	012	011							114
315-329	001	032	020	025	011	011	001						101
330-344	003	035	014	023	034	009	004						122
345-359	007	043	033	049	029	008	004	001					174
	43		721		503		88		2		0		3337
		846		763		358		13		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M, START DATE 15/05/73

MEDIAN (MM/S)	FREQUENCY NO, PCT	50	100	150	200	250
8	0 0	.	.	.	.	.
24	1 0					
40	3 0	*				
56	15 0	***				
72	24 1	*****				
88	138 4	*****				
104	177 5	*****				
120	204 6	*****				
136	185 6	*****				
152	142 4	*****				
168	161 5	*****				
184	135 4	*****				
200	161 5	*****				
216	143 4	*****				
232	162 5	*****				
248	114 3	*****				
264	170 5	*****				
280	160 5	*****				
296	145 4	*****				
312	133 4	*****				
328	120 4	*****				
344	129 4	*****				
360	107 3	*****				
376	83 2	*****				
392	87 3	*****				
408	71 2	*****				
424	89 3	*****				
440	68 2	*****				
456	61 2	*****				
472	46 1	*****				
488	28 1	*****				
504	23 1	*****				
520	16 0	***				
536	13 0	***				
552	11 0	**				
568	4 0	*				
584	6 0	*				
600	0 0					
616	0 0					
632	0 0					

NO. OF SAMPLES OVER 640 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3337  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M, START DATE 15/05/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	141	4	*****				
15	177	5	*****				
25	200	6	*****				
35	80	2	*****				
45	85	3	*****				
55	54	2	*****				
65	66	2	*****				
75	52	2	*****				
85	51	2	*****				
95	64	2	*****				
105	38	1	*****				
115	43	1	*****				
125	55	2	*****				
135	60	2	*****				
145	69	2	*****				
155	58	2	*****				
165	66	2	*****				
175	98	3	*****				
185	122	4	*****				
195	151	5	*****				
205	175	5	*****				
215	132	4	*****				
225	137	4	*****				
235	116	3	*****				
245	121	4	*****				
255	86	3	*****				
265	82	2	*****				
275	77	2	*****				
285	94	3	*****				
295	80	2	*****				
305	75	2	*****				
315	67	2	*****				
325	83	2	*****				
335	82	2	*****				
345	95	3	*****				
355	105	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3337  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M, START DATE 15/05/73

MEDIAN (DEG.C)	FREQNCY NO.	PCT		100	200	300	400	500
7.48	13	0	*	.	.	.	.	.
7.64	42	1	****					
7.80	24	1	**					
7.96	28	1	***					
8.12	165	5	*****					
8.28	448	13	*****					
8.44	496	15	*****					
8.60	344	10	*****					
8.76	307	9	*****					
8.92	171	5	*****					
9.08	123	4	*****					
9.24	120	4	*****					
9.40	182	5	*****					
9.56	161	5	*****					
9.72	171	5	*****					
9.88	161	5	*****					
10.04	77	2	*****					
10.20	60	2	*****					
10.36	51	2	*****					
10.52	36	1	****					
10.68	30	1	***					
10.84	9	0	*					
11.00	14	0	*					
11.16	10	0	*					
11.32	7	0	*					
11.48	5	0	*					
11.64	6	0	*					
11.80	8	0	*					
11.96	7	0	*					
12.12	2	0						
12.28	2	0						
12.44	1	0						
12.60	2	0						
12.76	3	0						
12.92	3	0						
13.08	15	0	**					
13.24	12	0	*					
13.40	12	0	*					
13.56	9	0	*					
13.72	0	0						

NO. OF SAMPLES OVER 13.80 = 0

NO. OF SAMPLES UNDER 7.40 = 0

TOTAL NO. OF OBSERVATIONS = 3337

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 10M, START DATE 15/05/73

MEDIAN (PPT)	FREQUENCY NO. PCT	110	220	330	440	550
18.64	1 0	.	.	.	.	.
18.92	0 0					
19.20	1 0					
19.48	4 0					
19.76	5 0					
20.04	1 0					
20.32	5 0					
20.60	11 0 *					
20.88	5 0					
21.16	8 0 *					
21.44	8 0 *					
21.72	3 0					
22.00	1 0					
22.28	2 0					
22.56	14 0 *					
22.84	8 0 *					
23.12	11 0 *					
23.40	14 0 *					
23.68	10 0 *					
23.96	8 0 *					
24.24	4 0					
24.52	17 1 **					
24.80	24 1 **					
25.08	17 1 **					
25.36	40 1 *****					
25.64	95 3 *****					
25.92	149 4 *****					
26.20	136 4 *****					
26.48	180 5 *****					
26.76	235 7 *****					
27.04	277 8 *****					
27.32	357 11 *****					
27.60	283 8 *****					
27.88	522 16 *****					
28.16	514 15 *****					
28.44	249 7 *****					
28.72	71 2 *****					
29.00	41 1 *****					
29.28	6 0 *					
29.56	0 0					

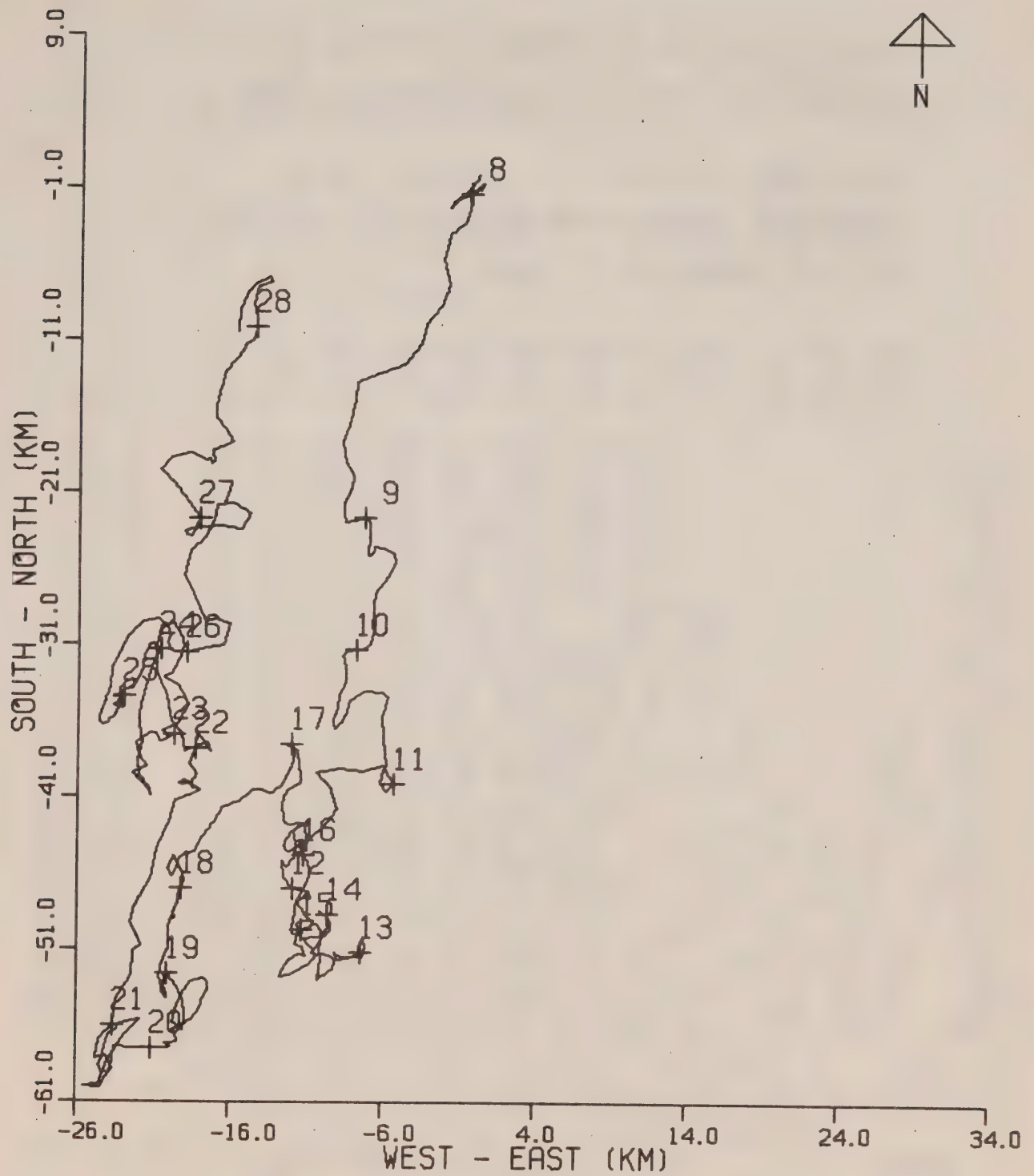
NO. OF SAMPLES OVER 29.70 = 0

NO. OF SAMPLES UNDER 18.50 = 0

TOTAL NO. OF OBSERVATIONS = 3337

SAMPLE INTERVAL = 10 MINUTES

RELEASED.



STN. NO. HS-5N

DEPTH 10 M.

STARTING DATE: 7/ 6/73      ENDING DATE: 28/ 6/73

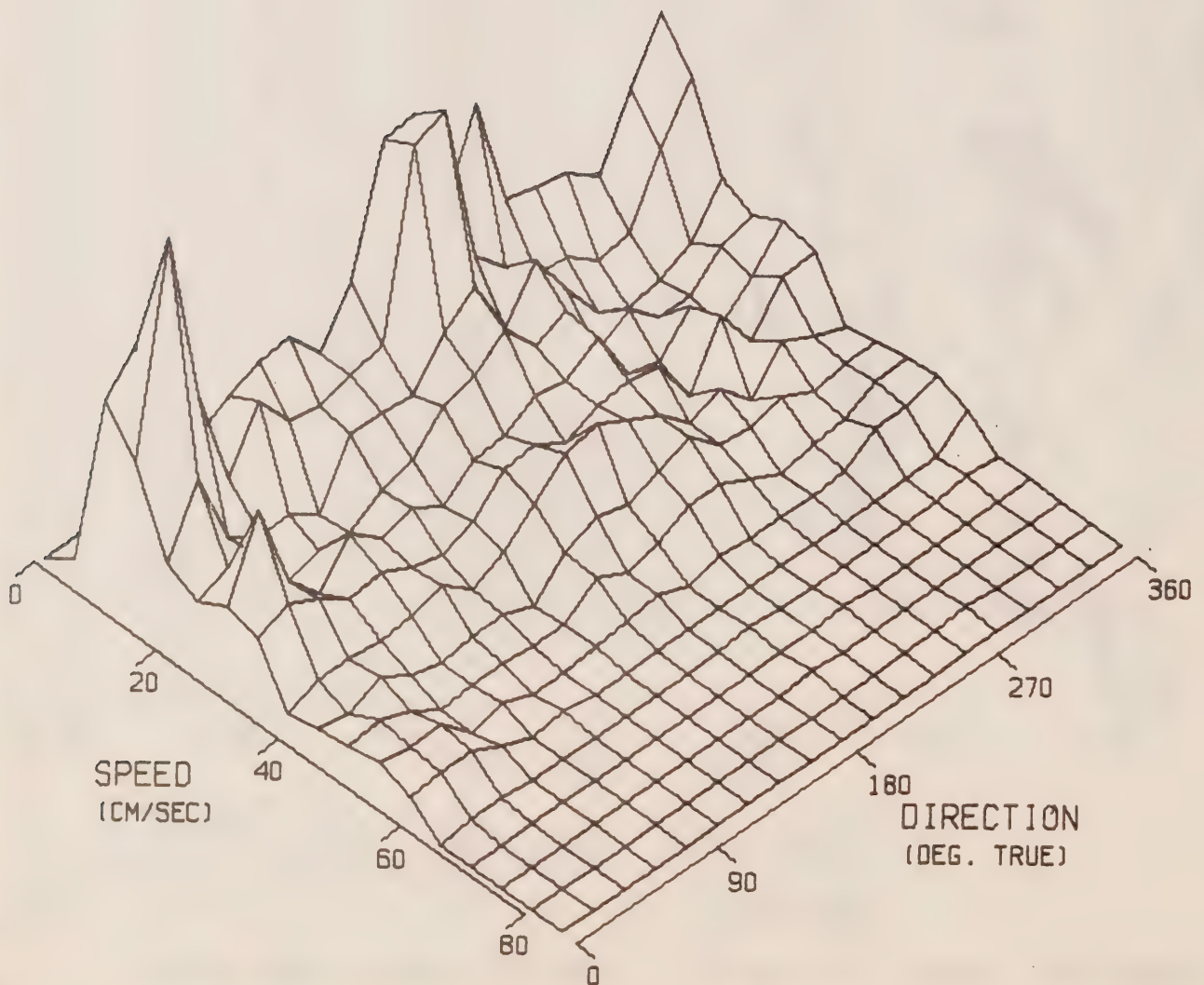


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 7/ 6/73

NO. OF SAMPLES = 2994



STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 7/ 6/73

SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	007	058	036	022	018	008	012	005					166
15- 29	007	100	045	033	027	010	011	009					242
30- 44	002	048	026	027	020	006	008	010					147
45- 59	004	035	015	006	011	007	005	003					86
60- 74	002	031	013	012	009	007	001	001					76
75- 89	006	042	019	014	020	005	002	001					109
90-104	004	034	006	015	012	007	002	001					81
105-119	002	034	017	008	006	002							69
120-134	004	037	029	014	012	005	001						102
135-149	005	030	021	010	011	002	001						80
150-164	007	030	026	017	018	010	007						115
165-179	009	067	025	028	017	015	006						167
180-194	016	099	048	028	022	015	003			001		001	233
195-209	013	083	040	035	020	017	004		001				213
210-224	011	050	020	028	023	017	005						154
225-239	013	045	028	027	020	019	009						161
240-254	011	054	030	022	021	012	004		001				155
255-269	005	030	019	010	019	011	004						98
270-284	009	028	009	011	009	008	002						77
285-299	006	025	007	015	011	007	001			001			72
300-314	008	021	005	013	015	009	007						78
315-329	010	021	007	009	011	007	005	001					71
330-344	006	040	012	014	017	008	011	005					113
345-359		058	018	017	014	011	009	002					129
	167		521		383		120		2		1		2994
	1100		435		225		38			1		1	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M, START DATE 07/06/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	70	140	210	280	350
8	1	0	.	.	.	.	.
24	0	0					
40	8	0	*				
56	56	2	*****				
72	102	3	*****				
88	215	7	*****				
104	223	7	*****				
120	268	9	*****				
136	215	7	*****				
152	179	6	*****				
168	132	4	*****				
184	130	4	*****				
200	100	3	*****				
216	89	3	*****				
232	95	3	*****				
248	69	2	*****				
264	79	3	*****				
280	88	3	*****				
296	85	3	*****				
312	89	3	*****				
328	109	4	*****				
344	72	2	*****				
360	81	3	*****				
376	71	2	*****				
392	61	2	*****				
408	42	1	*****				
424	48	2	*****				
440	43	1	*****				
456	39	1	*****				
472	42	1	*****				
488	25	1	****				
504	26	1	****				
520	31	1	****				
536	20	1	***				
552	22	1	***				
568	7	0	*				
584	12	0	**				
600	10	0	*				
616	2	0					
632	3	0					

NO. OF SAMPLES OVER 640 = 5  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2994  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M, START DATE 07/06/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	118	4	*****				
15	156	5	*****				
25	146	5	*****				
35	107	4	*****				
45	71	2	*****				
55	48	2	*****				
65	52	2	*****				
75	55	2	*****				
85	77	3	*****				
95	55	2	*****				
105	51	2	*****				
115	46	2	*****				
125	72	2	*****				
135	61	2	*****				
145	51	2	*****				
155	77	3	*****				
165	93	3	*****				
175	118	4	*****				
185	156	5	*****				
195	148	5	*****				
205	140	5	*****				
215	108	4	*****				
225	92	3	*****				
235	118	4	*****				
245	111	4	*****				
255	77	3	*****				
265	52	2	*****				
275	54	2	*****				
285	55	2	*****				
295	45	2	*****				
305	55	2	*****				
315	39	1	*****				
325	56	2	*****				
335	68	2	*****				
345	82	3	*****				
355	84	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2994  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M. START DATE 07/06/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT .	50	100	150	200	250
8.04	0	0	.	.	.	.	.
8.12	1	0					
8.20	6	0	*				
8.28	13	0	***				
8.36	82	3	*****				
8.44	164	5	*****				
8.52	171	6	*****				
8.60	114	4	*****				
8.68	104	3	*****				
8.76	82	3	*****				
8.84	173	6	*****				
8.92	96	3	*****				
9.00	151	5	*****				
9.08	112	4	*****				
9.16	113	4	*****				
9.24	48	2	*****				
9.32	54	2	*****				
9.40	56	2	*****				
9.48	123	4	*****				
9.56	62	2	*****				
9.64	140	5	*****				
9.72	100	3	*****				
9.80	200	7	*****				
9.88	128	4	*****				
9.96	148	5	*****				
10.04	81	3	*****				
10.12	79	3	*****				
10.20	81	3	*****				
10.28	78	3	*****				
10.36	55	2	*****				
10.44	45	2	*****				
10.52	38	1	*****				
10.60	27	1	*****				
10.68	20	1	****				
10.76	10	0	**				
10.84	12	0	**				
10.92	9	0	**				
11.00	10	0	**				
11.08	3	0	*				
11.16	0	0					

NO. OF SAMPLES OVER 11.20 = 5

NO. OF SAMPLES UNDER 8.00 = 0

TOTAL NO. OF OBSERVATIONS = 2994

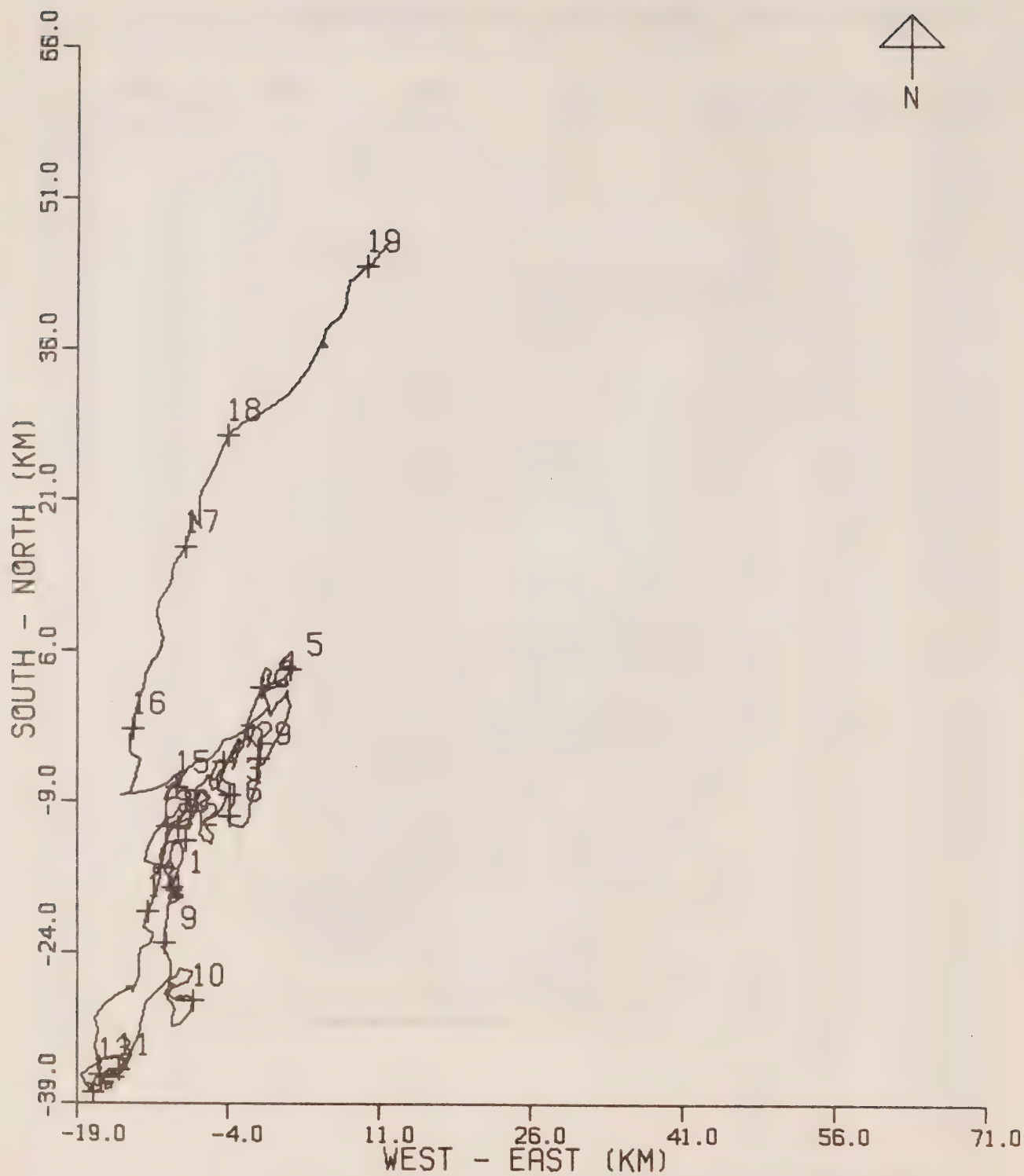
SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 10M. START DATE 07/06/73

MEDIAN (PPT)	FREQUENCY NO.	PCT.	70	140	210	280	350
23.08	0	0	.	.	.	.	.
23.24	3	0					
23.40	1	0					
23.56	0	0					
23.72	1	0					
23.88	3	0					
24.04	4	0	*				
24.20	6	0	*				
24.36	8	0	*				
24.52	11	0	**				
24.68	9	0	*				
24.84	11	0	**				
25.00	10	0	*				
25.16	23	1	***				
25.32	31	1	****				
25.48	31	1	****				
25.64	44	1	*****				
25.80	52	2	*****				
25.96	72	2	*****				
26.12	74	2	*****				
26.28	106	4	*****				
26.44	78	3	*****				
26.60	93	3	*****				
26.76	116	4	*****				
26.92	152	5	*****				
27.08	171	6	*****				
27.24	137	5	*****				
27.40	150	5	*****				
27.56	169	6	*****				
27.72	170	6	*****				
27.88	216	7	*****				
28.04	197	7	*****				
28.20	206	7	*****				
28.36	139	5	*****				
28.52	198	7	*****				
28.68	235	8	*****				
28.84	42	1	*****				
29.00	19	1	***				
29.16	0	0					
29.32	0	0					

NO. OF SAMPLES OVER 29.40 = 0  
 NO. OF SAMPLES UNDER 23.00 = 6  
 TOTAL NO. OF OBSERVATIONS = 2994  
 SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 10 M.

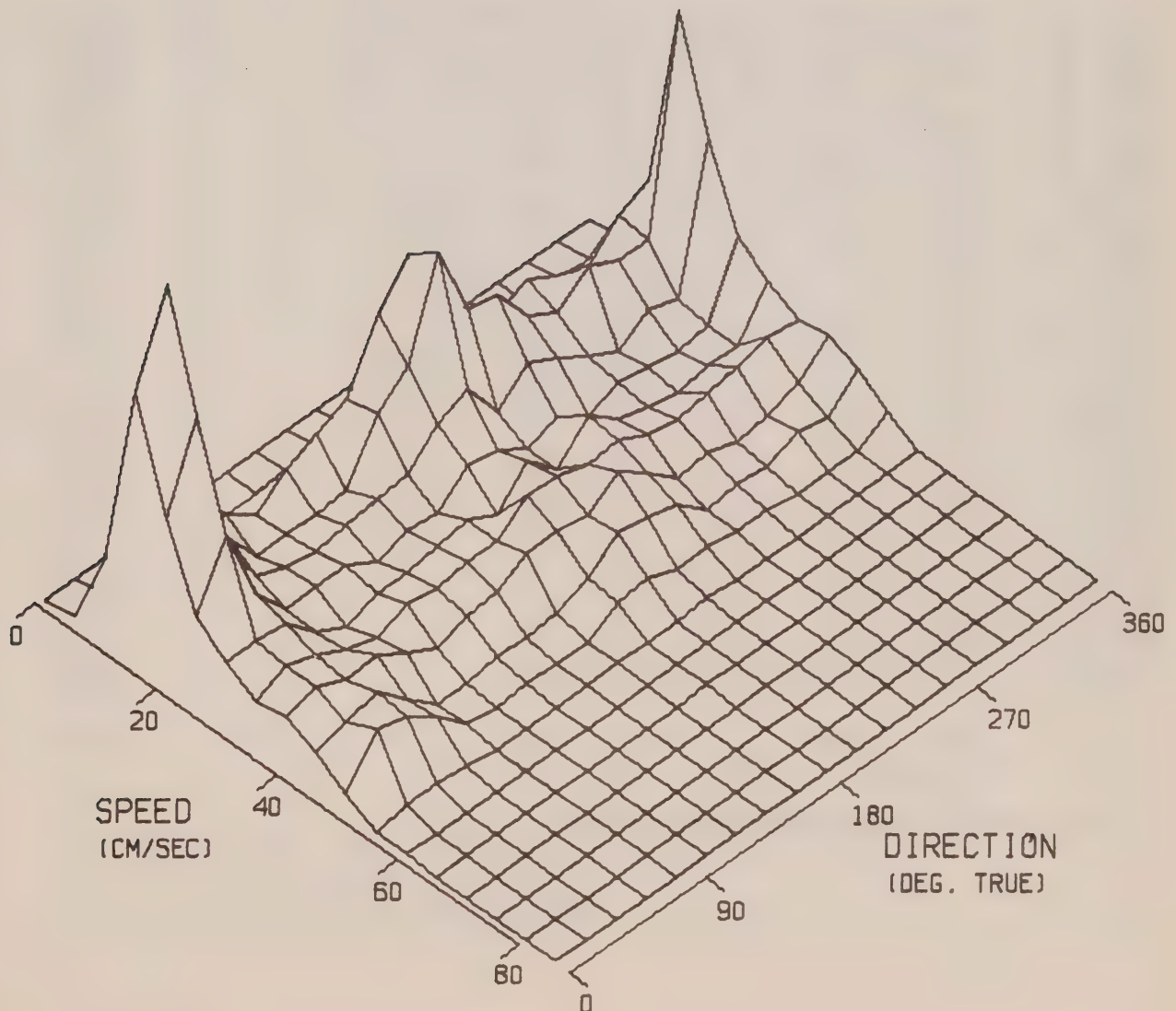
STARTING DATE: 28/ 6/73    ENDING DATE: 19/ 7/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 28/ 6/73

NO. OF SAMPLES = 3000





STN. NO. H8-5N DEPTH 10 M.

STARTING DATE: 28/ 6/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	003	101	093	045	021	016	008	002					289
15- 29	001	112	121	046	027	030	021						358
30- 44	001	074	049	026	022	028	017	001					218
45- 59		041	031	019	024	020	013						148
60- 74	002	022	013	012	015	013	007						84
75- 89	001	016	015	008	013	002	002						57
90-104	003	011	009	019	012	003							57
105-119	001	016	008	007	014	004	001						51
120-134	001	015	020	013	013	006							68
135-149	001	019	011	015	018	008							72
150-164	004	026	014	015	022	008							89
165-179	003	059	026	015	017	009	003						132
180-194	006	069	034	014	025	016	005		001				170
195-209	002	087	037	026	024	022	005						203
210-224	005	078	016	012	031	020	002						164
225-239	005	056	025	013	018	015	004						136
240-254	001	031	021	026	022	009	002						112
255-269	002	026	022	009	019	003	002						83
270-284	001	027	015	012	013	006	002						76
285-299	004	031	015	008	012	005							75
300-314	001	025	015	009	015	003							68
315-329	003	021	019	011	014	009	001						78
330-344	001	021	010	009	016	011							68
345-359		055	043	015	018	012	001						144
	52		682		445		96		1		0		3000
	1039			404		278		3		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M. START DATE 28/06/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	60	120	180	240	300
8	0 0	.	.	.	.	.
24	3 0	*				
40	1 0					
56	7 0	*				
72	41 1	*****				
88	113 4	*****				
104	227 8	*****				
120	232 8	*****				
136	256 9	*****				
152	211 7	*****				
168	181 6	*****				
184	150 5	*****				
200	130 4	*****				
216	144 5	*****				
232	95 3	*****				
248	83 3	*****				
264	77 3	*****				
280	68 2	*****				
296	73 2	*****				
312	85 3	*****				
328	113 4	*****				
344	90 3	*****				
360	90 3	*****				
376	88 3	*****				
392	77 3	*****				
408	54 2	*****				
424	63 2	*****				
440	48 2	*****				
456	57 2	*****				
472	43 1	*****				
488	38 1	*****				
504	32 1	*****				
520	19 1	***				
536	7 0	*				
552	0 0					
568	2 0					
584	1 0					
600	0 0					
616	0 0					
632	0 0					

NO. OF SAMPLES OVER 640 = 1  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M. START DATE 28/06/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	214	7	*****				
15	212	7	*****				
25	244	8	*****				
35	139	5	*****				
45	126	4	*****				
55	86	3	*****				
65	57	2	*****				
75	45	2	*****				
85	37	1	*****				
95	37	1	*****				
105	34	1	*****				
115	36	1	*****				
125	43	1	*****				
135	54	2	*****				
145	41	1	*****				
155	53	2	*****				
165	79	3	*****				
175	95	3	*****				
185	106	4	*****				
195	145	5	*****				
205	126	4	*****				
215	120	4	*****				
225	79	3	*****				
235	97	3	*****				
245	85	3	*****				
255	48	2	*****				
265	60	2	*****				
275	57	2	*****				
285	48	2	*****				
295	45	1	*****				
305	46	2	*****				
315	47	2	*****				
325	52	2	*****				
335	46	2	*****				
345	65	2	*****				
355	98	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5M DEPTH 10M. START DATE 28/06/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	50	100	150	200	250
8.85	0	0	.	.	.	.	.
8.95	30	1	*****				
9.05	70	2	*****				
9.15	77	3	*****				
9.25	95	3	*****				
9.35	164	5	*****				
9.45	114	4	*****				
9.55	130	4	*****				
9.65	195	7	*****				
9.75	178	6	*****				
9.85	181	6	*****				
9.95	234	8	*****				
10.05	181	6	*****				
10.15	142	5	*****				
10.25	161	5	*****				
10.35	105	4	*****				
10.45	112	4	*****				
10.55	139	5	*****				
10.65	93	3	*****				
10.75	53	2	*****				
10.85	41	1	*****				
10.95	47	2	*****				
11.05	60	2	*****				
11.15	68	2	*****				
11.25	42	1	*****				
11.35	50	2	*****				
11.45	65	2	*****				
11.55	41	1	*****				
11.65	26	1	*****				
11.75	24	1	*****				
11.85	33	1	*****				
11.95	14	0	***				
12.05	24	1	*****				
12.15	9	0	**				
12.25	1	0					
12.35	1	0					
12.45	0	0					
12.55	0	0					
12.65	0	0					
12.75	0	0					

NO. OF SAMPLES OVER 12.80 = 0  
 NO. OF SAMPLES UNDER 8.80 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 10M. START DATE 28/06/73

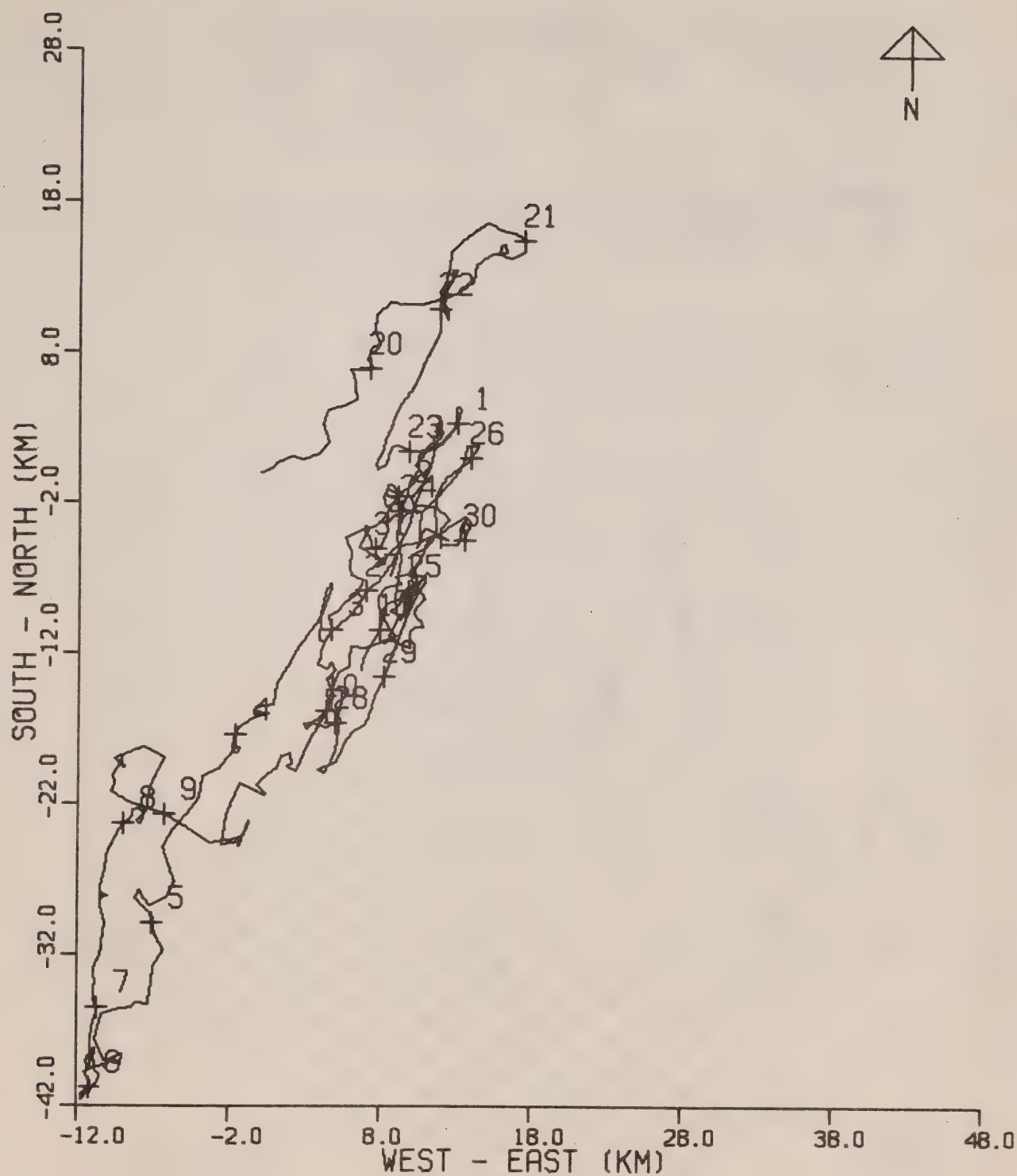
MEDIAN (PPT)	FREQUENCY			70	140	210	280	350
	NO.	PCT.		.	.	.	.	.
20.51	0	0						
20.73	2	0						
20.95	2	0						
21.17	1	0						
21.39	0	0						
21.61	0	0						
21.83	2	0						
22.05	3	0						
22.27	1	0						
22.49	1	0						
22.71	3	0						
22.93	1	0						
23.15	3	0						
23.37	5	0	*					
23.59	5	0	*					
23.81	4	0	*					
24.03	6	0	*					
24.25	21	1	***					
24.47	27	1	****					
24.69	46	2	*****					
24.91	34	1	*****					
25.13	47	2	*****					
25.35	29	1	****					
25.57	46	2	*****					
25.79	101	3	*****					
26.01	127	4	*****					
26.23	93	3	*****					
26.45	110	4	*****					
26.67	208	7	*****					
26.89	324	11	*****					
27.11	281	9	*****					
27.33	296	10	*****					
27.55	280	9	*****					
27.77	227	8	*****					
27.99	244	8	*****					
28.21	238	8	*****					
28.43	106	4	*****					
28.65	68	2	*****					
28.87	8	0	*					
29.09	0	0						

NO. OF SAMPLES OVER 29.20 = 0

NO. OF SAMPLES UNDER 20.40 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 10 M.

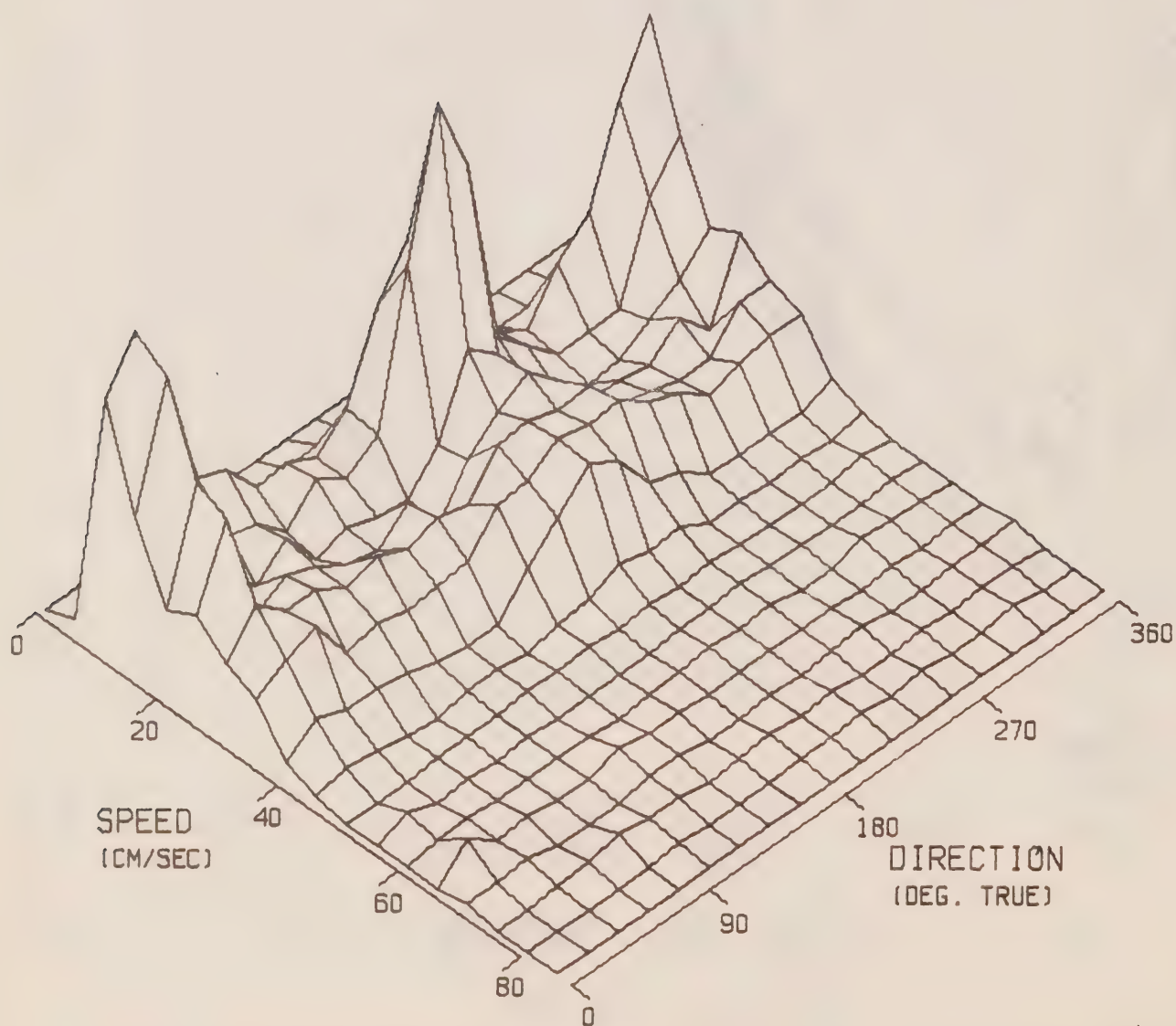
STARTING DATE: 19/ 7/73    ENDING DATE: 11/ 8/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 19/ 7/73

NO. OF SAMPLES = 3297



STN. NO. HS-5N

DEPTH 10 M.

STARTING DATE: 19/ 7/73

SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR.	SPEED												
	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	005	091	050	039	022	005			002				214
15- 29	008	115	079	054	026	006	002	006	007				303
30- 44	013	076	037	028	030	004		001	003		003		195
45- 59	005	048	027	021	017	004		001	003	002			128
60- 74	011	027	025	034	022	002	003	003	002	001			130
75- 89	008	030	026	024	012	001		001		004			106
90-104	005	024	012	024	014		001	001	001		001		83
105-119	003	025	017	024	021	005		003	002	004			104
120-134	003	017	013	022	005	002		001	003	001			67
135-149	006	015	014	026	015	001	001		002	001			81
150-164	005	025	010	014	029	004	001		001	001			90
165-179	005	044	015	018	026	009	002	002	001	002			124
180-194	002	096	039	043	038	010		003	001	002			234
195-209	003	110	059	035	041	015	003	001		001			268
210-224	002	104	044	040	039	017	001	001	001	001			250
225-239	002	045	030	032	034	011	002		001	002	001	001	161
240-254	004	024	026	029	031	008	002	004	001				129
255-269	002	015	009	020	019	004	001		002	002			74
270-284	001	007	008	016	021	001	002						56
285-299	002	023	007	014	014	001		001		001			63
300-314	003	012	008	019	012	001		002	001				58
315-329	004	031	011	020	013	002		002	001	002	001		87
330-344	013	037	015	019	017		002		001				104
345-359	011	086	029	028	012	001		003	001	001			172
	126	610		530		23		37		2			3281
	1127	643		114		36		28		5			

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 16



## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M, START DATE 19/07/73

MEDIAN (MM/S)	FREQUENCY NO. PCT .	90 .	180 .	270 .	360 .	450 .
10	0 0					
30	3 0					
50	34 1	****				
70	89 3	*****				
90	264 8	*****				
110	324 10	*****				
130	336 10	*****				
150	203 6	*****				
170	221 7	*****				
190	145 4	*****				
210	123 4	*****				
230	146 4	*****				
250	121 4	*****				
270	151 5	*****				
290	179 5	*****				
310	167 5	*****				
330	179 5	*****				
350	172 5	*****				
370	120 4	*****				
390	68 2	*****				
410	44 1	*****				
430	32 1	****				
450	20 1	**				
470	9 0	*				
490	8 0	*				
510	6 0	*				
530	6 0	*				
550	5 0	*				
570	4 0					
590	10 0	*				
610	8 0	*				
630	12 0	*				
650	14 0	**				
670	10 0	*				
690	7 0	*				
710	6 0	*				
730	13 0	*				
750	6 0	*				
770	4 0					
790	5 0	*				

NO. OF SAMPLES OVER 800 = 23  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3297  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M. START DATE 19/07/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	151	5	*****				
15	180	5	*****				
25	216	7	*****				
35	130	4	*****				
45	108	3	*****				
55	71	2	*****				
65	88	3	*****				
75	87	3	*****				
85	70	2	*****				
95	50	2	*****				
105	58	2	*****				
115	70	2	*****				
125	45	1	*****				
135	48	1	*****				
145	57	2	*****				
155	59	2	*****				
165	69	2	*****				
175	93	3	*****				
185	153	5	*****				
195	178	5	*****				
205	180	5	*****				
215	168	5	*****				
225	141	4	*****				
235	90	3	*****				
245	88	3	*****				
255	66	2	*****				
265	47	1	*****				
275	35	1	*****				
285	40	1	*****				
295	43	1	*****				
305	35	1	*****				
315	52	2	*****				
325	58	2	*****				
335	68	2	*****				
345	115	3	*****				
355	90	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3297  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M, START DATE 19/07/73

MEDIAN (DEG.C)	FREQUNCY NO.	PCT .	50 .	100 .	150 .	200 .	250 .
9.46	0	0					
9.58	0	0					
9.70	2	0					
9.82	21	1	****				
9.94	10	0	**				
10.06	39	1	*****				
10.18	48	1	*****				
10.30	115	3	*****				
10.42	174	5	*****				
10.54	112	3	*****				
10.66	137	4	*****				
10.78	127	4	*****				
10.90	196	6	*****				
11.02	223	7	*****				
11.14	137	4	*****				
11.26	159	5	*****				
11.38	167	5	*****				
11.50	167	5	*****				
11.62	162	5	*****				
11.74	101	3	*****				
11.86	129	4	*****				
11.98	116	4	*****				
12.10	86	3	*****				
12.22	122	4	*****				
12.34	115	3	*****				
12.46	108	3	*****				
12.58	80	2	*****				
12.70	88	3	*****				
12.82	68	2	*****				
12.94	47	1	*****				
13.06	93	3	*****				
13.18	72	2	*****				
13.30	16	0	***				
13.42	15	0	***				
13.54	20	1	****				
13.66	8	0	**				
13.78	13	0	***				
13.90	2	0					
14.02	0	0					
14.14	0	0					

NO. OF SAMPLES OVER 14.20 = 2

NO. OF SAMPLES UNDER 9.40 = 0

TOTAL NO. OF OBSERVATIONS = 3297

SAMPLE INTERVAL = 10 MINUTES

RELEASED.

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 10M, START DATE 19/07/73

MEDIAN (PPT)	FREQUENCY NO.	PCT .	70	140	210	280	350
24.06	0	0	.	.	.	.	.
24.18	1	0					
24.30	2	0					
24.42	1	0					
24.54	7	0	*				
24.66	8	0	*				
24.78	10	0	*				
24.90	11	0	**				
25.02	25	1	*****				
25.14	17	1	**				
25.26	8	0	*				
25.38	12	0	**				
25.50	27	1	*****				
25.62	32	1	*****				
25.74	35	1	*****				
25.86	88	3	*****				
25.98	210	6	*****				
26.10	147	4	*****				
26.22	99	3	*****				
26.34	94	3	*****				
26.46	106	3	*****				
26.58	95	3	*****				
26.70	132	4	*****				
26.82	146	4	*****				
26.94	156	5	*****				
27.06	202	6	*****				
27.18	262	8	*****				
27.30	183	6	*****				
27.42	234	7	*****				
27.54	278	8	*****				
27.66	263	8	*****				
27.78	184	6	*****				
27.90	112	3	*****				
28.02	66	2	*****				
28.14	34	1	*****				
28.26	5	0	*				
28.38	3	0					
28.50	0	0					
28.62	0	0					
28.74	0	0					

NO. OF SAMPLES OVER 28.80 = 0

NO. OF SAMPLES UNDER 24.00 = 2

TOTAL NO. OF OBSERVATIONS = 3297

SAMPLE INTERVAL = 10 MINUTES





STN. NO. HS-5N

DEPTH 10 M.

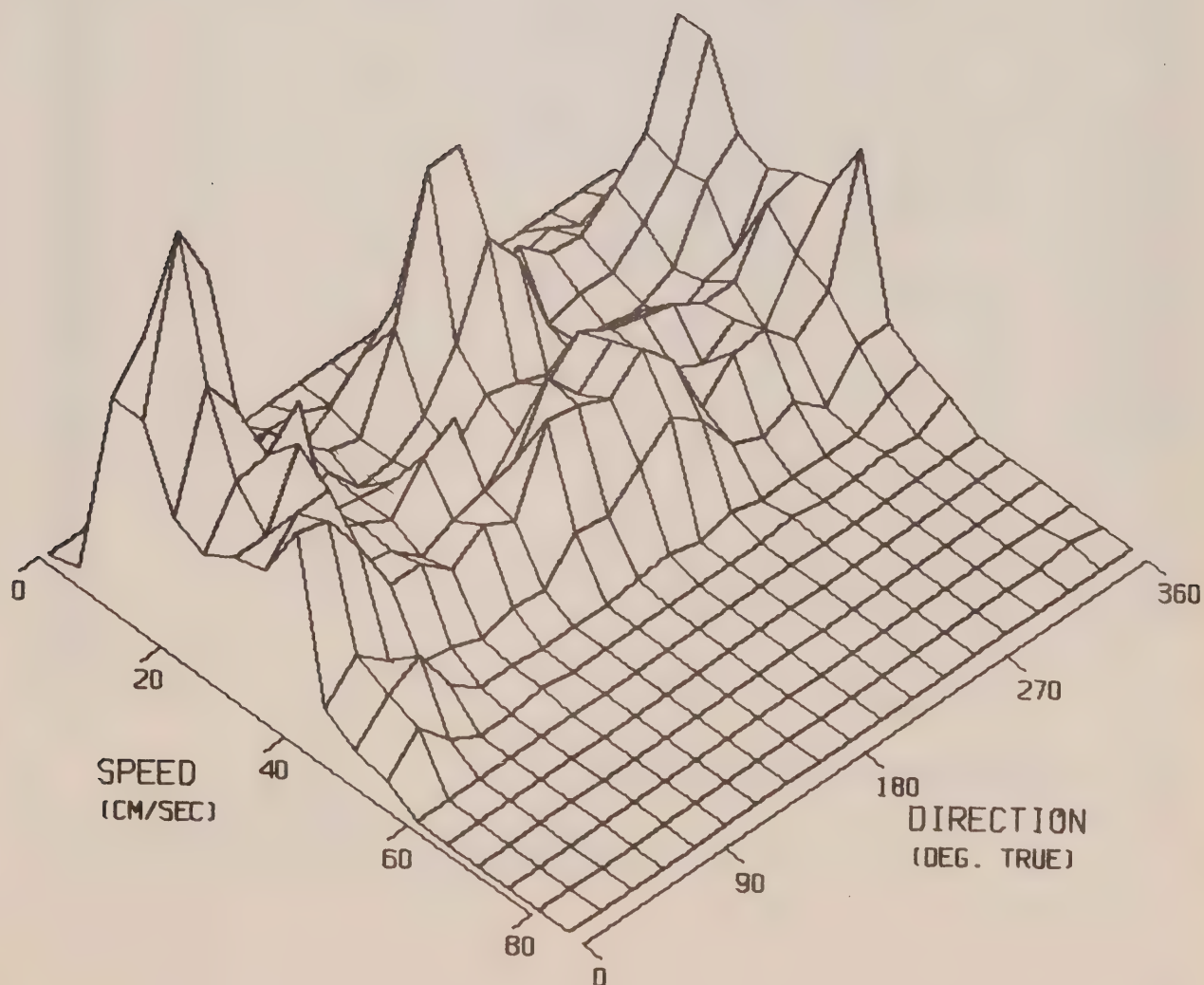
STARTING DATE: 14/ 8/73    ENDING DATE: 3/ 9/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 14/ 8/73

NO. OF SAMPLES = 2905



STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 14/ 8/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	004	068	044	026	042	024	008	004					220
15- 29	006	077	076	034	046	026	015	003					283
30- 44	004	072	055	053	047	021	020						272
45- 59	001	048	028	040	029	009	004						159
60- 74		014	024	036	022	014	003						113
75- 89		013	013	023	017	013							79
90-104	002	021	023	013	014	007	001						81
105-119	003	011	009	019	022	006	001						71
120-134	004	013	008	019	019	005							68
135-149	002	008	008	023	015	009							65
150-164		025	014	013	026	016							94
165-179		035	021	011	028	024							119
180-194	001	043	045	019	033	017	002						160
195-209	001	060	046	018	026	021	001						173
210-224	002	032	035	026	033	028							156
225-239	003	013	018	022	029	037							122
240-254	005	013	015	021	018	021							93
255-269	002	012	005	022	021	005	001						68
270-284	003	010	006	023	015	009							66
285-299	001	011	006	013	019	012							62
300-314	006	013	003	011	010	013							56
315-329	001	011	015	015	013	004	001						60
330-344	002	019	021	015	023	009	004			001			94
345-359	007	033	029	038	042	022							171
	60	567	609	61	0	0	0	2905					
	675	553	372	7	1	0							

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M, START DATE 14/08/73

MEDIAN (MM/S)	FREQUENCY NO. PCT	40	80	120	160	200
8	0 0	.	.	.	.	.
24	0 0					
40	5 0	*				
56	19 1	*****				
72	36 1	*****				
88	85 3	*****				
104	134 5	*****				
120	148 5	*****				
136	163 6	*****				
152	145 5	*****				
168	146 5	*****				
184	136 5	*****				
200	108 4	*****				
216	94 3	*****				
232	112 4	*****				
248	77 3	*****				
264	84 3	*****				
280	117 4	*****				
296	127 4	*****				
312	119 4	*****				
328	130 4	*****				
344	107 4	*****				
360	141 5	*****				
376	118 4	*****				
392	153 5	*****				
408	79 3	*****				
424	101 3	*****				
440	70 2	*****				
456	51 2	*****				
472	33 1	*****				
488	21 1	*****				
504	14 0	****				
520	13 0	***				
536	8 0	**				
552	5 0	*				
568	7 0	**				
584	0 0					
600	0 0					
616	0 0					
632	0 0					

NO. OF SAMPLES OVER 640 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2908  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M, START DATE 14/08/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	154	5	*****				
15	184	6	*****				
25	187	6	*****				
35	190	7	*****				
45	138	5	*****				
55	96	3	*****				
65	75	3	*****				
75	50	2	*****				
85	59	2	*****				
95	55	2	*****				
105	43	1	*****				
115	54	2	*****				
125	37	1	*****				
135	53	2	*****				
145	40	1	*****				
155	66	2	*****				
165	60	2	*****				
175	98	3	*****				
185	104	4	*****				
195	112	4	*****				
205	117	4	*****				
215	106	4	*****				
225	92	3	*****				
235	77	3	*****				
245	64	2	*****				
255	46	2	*****				
265	45	2	*****				
275	46	2	*****				
285	36	1	*****				
295	44	2	*****				
305	39	1	*****				
315	32	1	*****				
325	48	2	*****				
335	64	2	*****				
345	91	3	*****				
355	106	4	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2908  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M. START DATE 14/08/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	80	160	240	320	400
9.77	6	0	*				
9.91	16	1	**				
10.05	28	1	****				
10.19	87	3	*****				
10.33	114	4	*****				
10.47	101	3	*****				
10.61	228	8	*****				
10.75	282	10	*****				
10.89	279	10	*****				
11.03	278	10	*****				
11.17	200	7	*****				
11.31	154	5	*****				
11.45	126	4	*****				
11.59	128	4	*****				
11.73	110	4	*****				
11.87	99	3	*****				
12.01	84	3	*****				
12.15	66	2	*****				
12.29	85	3	*****				
12.43	52	2	*****				
12.57	33	1	****				
12.71	34	1	****				
12.85	22	1	***				
12.99	21	1	***				
13.13	17	1	**				
13.27	35	1	****				
13.41	29	1	****				
13.55	27	1	***				
13.69	25	1	***				
13.83	27	1	***				
13.97	26	1	***				
14.11	26	1	***				
14.25	12	0	**				
14.39	20	1	***				
14.53	6	0	*				
14.67	2	0					
14.81	2	0					
14.95	3	0					
15.09	4	0	*				
15.23	4	0	*				

NO. OF SAMPLES OVER 15.30 = 10  
 NO. OF SAMPLES UNDER 9.70 = 0  
 TOTAL NO. OF OBSERVATIONS = 2908  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 10M. START DATE 14/08/73

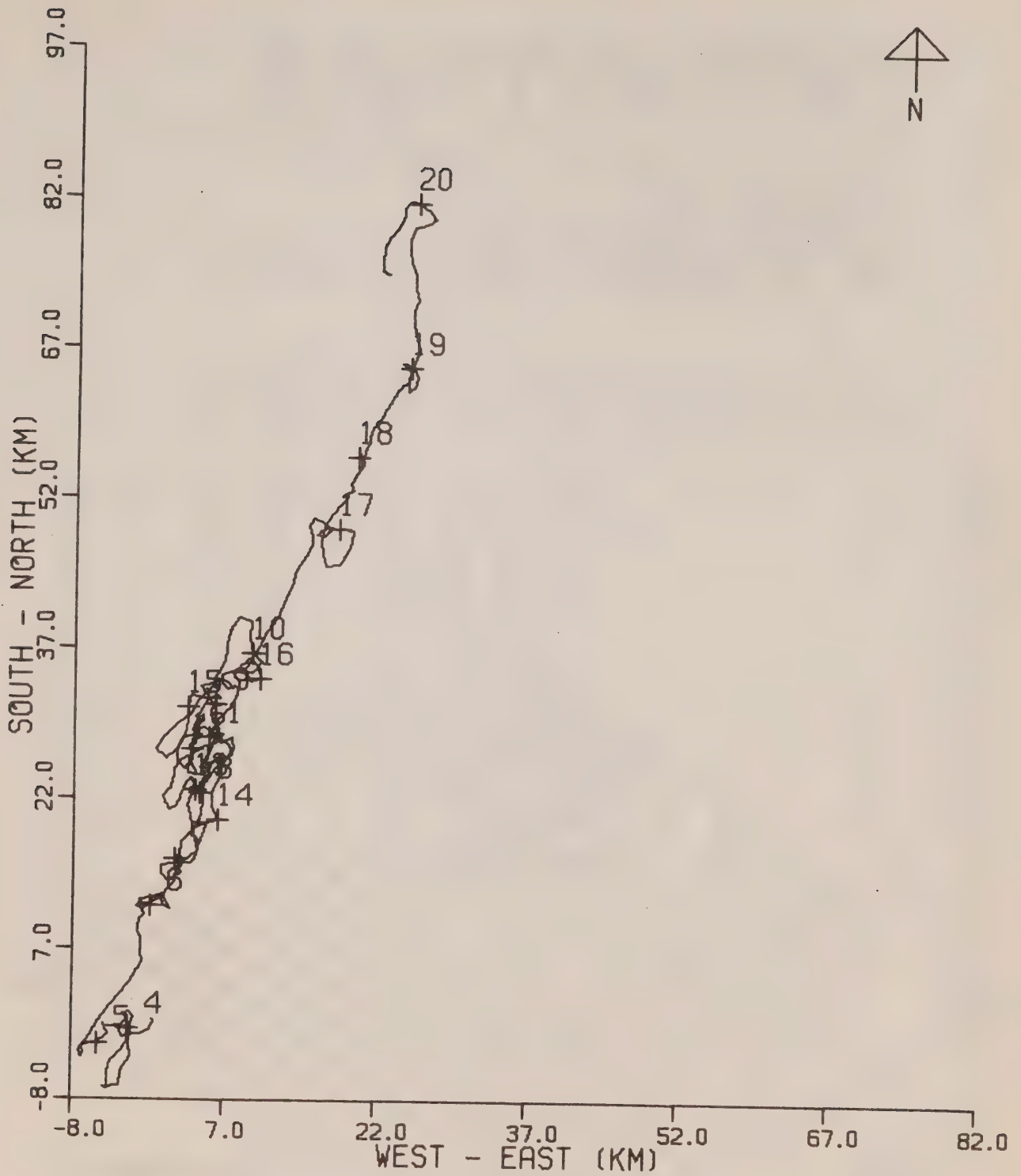
MEDIAN (PPT)	FREQUENCY		80	160	240	320	400
	NO.	PCT	.	.	.	.	.
23.47	6	0	*				
23.61	4	0	*				
23.75	11	0	*				
23.89	16	1	**				
24.03	8	0	*				
24.17	13	0	**				
24.31	12	0	**				
24.45	9	0	*				
24.59	11	0	*				
24.73	15	1	**				
24.87	21	1	***				
25.01	18	1	**				
25.15	18	1	**				
25.29	15	1	**				
25.43	28	1	*****				
25.57	27	1	***				
25.71	16	1	**				
25.85	17	1	**				
25.99	26	1	***				
26.13	27	1	***				
26.27	50	2	*****				
26.41	72	2	*****				
26.55	60	2	*****				
26.69	63	2	*****				
26.83	98	3	*****				
26.97	107	4	*****				
27.11	78	3	*****				
27.25	165	6	*****				
27.39	222	8	*****				
27.53	394	14	*****				
27.67	259	9	*****				
27.81	371	13	*****				
27.95	238	8	*****				
28.09	144	5	*****				
28.23	131	5	*****				
28.37	92	3	*****				
28.51	19	1	**				
28.65	3	0					
28.79	0	0					
28.93	0	0					

NO. OF SAMPLES OVER 29.00 = 0

NO. OF SAMPLES UNDER 23.40 = 24

TOTAL NO. OF OBSERVATIONS = 2908

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 10 M.

STARTING DATE: 3/ 9/73      ENDING DATE: 20/ 9/73

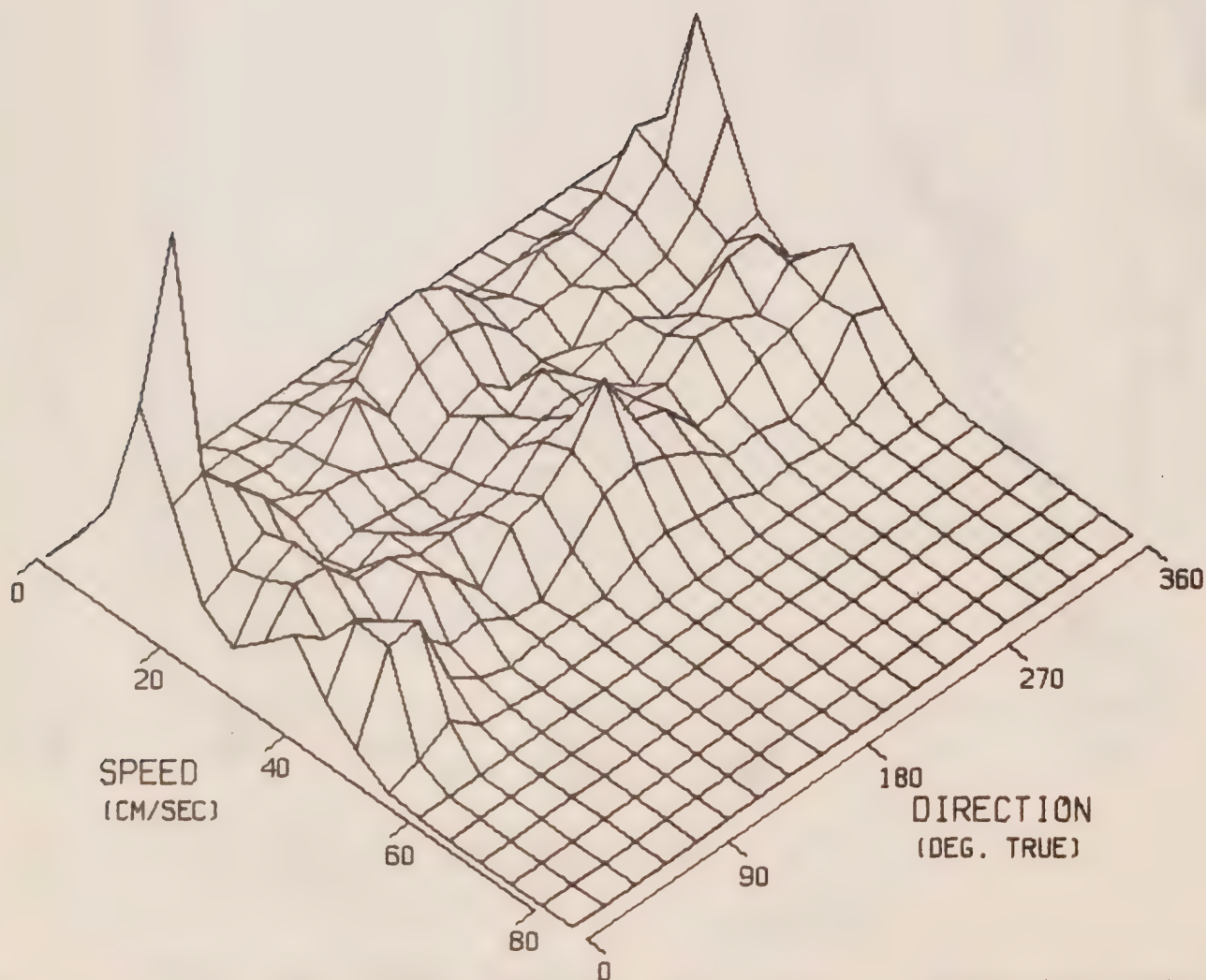


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 3/ 9/73

NO. OF SAMPLES = 2426



STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 3/ 9/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

# SPEED

DIR	000	080	160	240	320	400	480	560	640	720	800	880
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO
	079	159	239	319	399	479	559	639	719	799	879	959
0- 14	009	054	055	016	029	026	012					201
15- 29	010	085	056	029	027	035	027					269
30- 44	004	041	044	028	035	022	030	001				205
45- 59	006	027	028	022	024	028	016					151
60- 74	004	013	014	010	008	007	006					62
75- 89	003	008	014	008	024	017	002					76
90-104	002	008	011	015	014	012						62
105-119	004	004	016	010	012	002	001					49
120-134	004	011	008	006	010	001						40
135-149	005	021	009	005	020	006	001					67
150-164	002	014	003	004	014	012						49
165-179	006	017	012	014	019	022	002					92
180-194	003	035	011	016	029	027	004					125
195-209	003	031	013	018	026	029	006					126
210-224		028	010	018	024	023	003					106
225-239	003	018	009	016	020	012	004					82
240-254	002	011	006	008	014	013						54
255-269		008	007	008	010	006						39
270-284	001	016	017	014	021	006	001					76
285-299	003	015	011	014	022	006						71
300-314	004	017	010	010	018	004						63
315-329	002	019	014	024	017	009						85
330-344	003	035	022	024	025	021	002					132
345-359	006	039	033	020	021	023	002					144
	89		433		483	119		0		0		2426
	575		357		369		1		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M. START DATE 03/09/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT .	30	60	90	120	150
8	0	0	.	.	.	.	.
24	4	0	*				
40	17	1	*****				
56	42	2	*****				
72	26	1	*****				
88	74	3	*****				
104	117	5	*****				
120	112	5	*****				
136	135	6	*****				
152	137	6	*****				
168	101	4	*****				
184	93	4	*****				
200	92	4	*****				
216	81	3	*****				
232	80	3	*****				
248	33	1	*****				
264	67	3	*****				
280	78	3	*****				
296	91	4	*****				
312	74	3	*****				
328	89	4	*****				
344	103	4	*****				
360	106	4	*****				
376	117	5	*****				
392	93	4	*****				
408	70	3	*****				
424	67	3	*****				
440	73	3	*****				
456	82	3	*****				
472	52	2	*****				
488	53	2	*****				
504	33	1	*****				
520	21	1	*****				
536	9	0	***				
552	3	0	*				
568	1	0					
584	0	0					
600	0	0					
616	0	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2426  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M. START DATE 03/09/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	146	6	*****				
15	155	6	*****				
25	184	8	*****				
35	139	6	*****				
45	114	5	*****				
55	94	4	*****				
65	42	2	*****				
75	46	2	*****				
85	46	2	*****				
95	45	2	*****				
105	36	1	*****				
115	31	1	*****				
125	27	1	*****				
135	40	2	*****				
145	39	2	*****				
155	34	1	*****				
165	48	2	*****				
175	66	3	*****				
185	85	4	*****				
195	74	3	*****				
205	94	4	*****				
215	68	3	*****				
225	59	2	*****				
235	57	2	*****				
245	35	1	*****				
255	28	1	*****				
265	30	1	*****				
275	43	2	*****				
285	52	2	*****				
295	49	2	*****				
305	39	2	*****				
315	49	2	*****				
325	64	3	*****				
335	89	4	*****				
345	90	4	*****				
355	89	4	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2426  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M. START DATE 03/09/73

MEDIAN (DEG.C)	FREQNCY NO.	PCT .	60	120	180	240	300
9.26	0	0	.	.	.	.	.
9.38	2	0					
9.50	11	0	**				
9.62	28	1	*****				
9.74	51	2	*****				
9.86	76	3	*****				
9.98	108	4	*****				
10.10	90	4	*****				
10.22	163	7	*****				
10.34	195	8	*****				
10.46	191	8	*****				
10.58	258	11	*****				
10.70	183	8	*****				
10.82	170	7	*****				
10.94	113	5	*****				
11.06	122	5	*****				
11.18	113	5	*****				
11.30	128	5	*****				
11.42	101	4	*****				
11.54	80	3	*****				
11.66	63	3	*****				
11.78	39	2	*****				
11.90	41	2	*****				
12.02	19	1	***				
12.14	18	1	***				
12.26	18	1	***				
12.38	3	0	*				
12.50	13	1	**				
12.62	7	0	*				
12.74	3	0	*				
12.86	6	0	*				
12.98	4	0	*				
13.10	5	0	*				
13.22	2	0					
13.34	1	0					
13.46	0	0					
13.58	1	0					
13.70	0	0					
13.82	0	0					
13.94	0	0					

NO. OF SAMPLES OVER 14.00 = 0

NO. OF SAMPLES UNDER 9.20 = 0

TOTAL NO. OF OBSERVATIONS = 2426

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 10M, START DATE 03/09/73

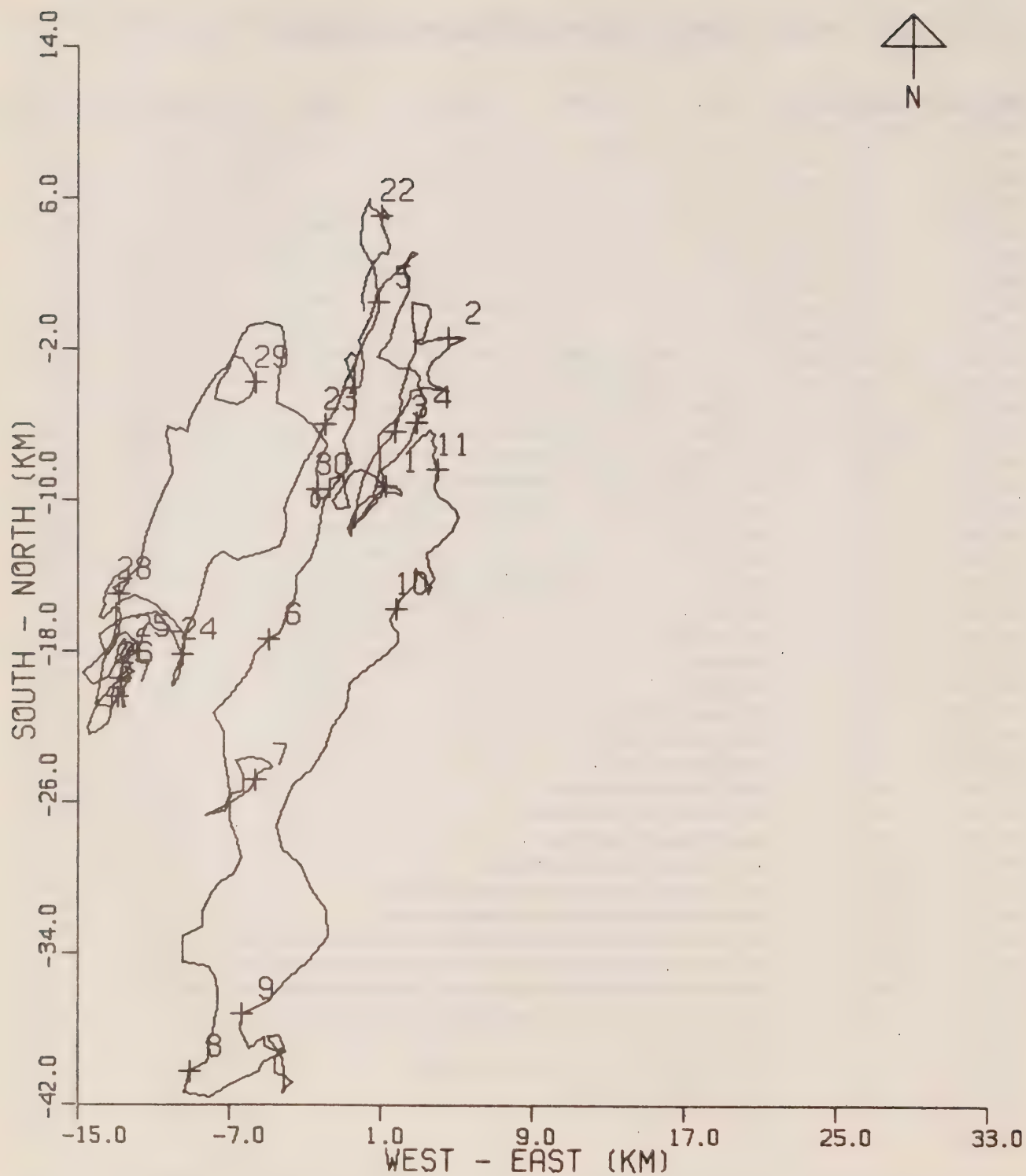
MEDIAN (PPT)	FREQUENCY NO.	PCT	60	120	180	240	300
25.05	0	0	.	.	.	.	.
25.15	1	0					
25.25	1	0					
25.35	0	0					
25.45	0	0					
25.55	4	0	*				
25.65	7	0	*				
25.75	7	0	*				
25.85	8	0	*				
25.95	3	0	*				
26.05	0	0					
26.15	2	0					
26.25	12	0	**				
26.35	13	1	**				
26.45	4	0	*				
26.55	14	1	**				
26.65	12	0	**				
26.75	13	1	**				
26.85	24	1	*****				
26.95	39	2	*****				
27.05	27	1	*****				
27.15	29	1	*****				
27.25	56	2	*****				
27.35	57	2	*****				
27.45	58	2	*****				
27.55	88	4	*****				
27.65	94	4	*****				
27.75	91	4	*****				
27.85	115	5	*****				
27.95	151	6	*****				
28.05	158	7	*****				
28.15	213	9	*****				
28.25	209	9	*****				
28.35	235	10	*****				
28.45	190	8	*****				
28.55	202	8	*****				
28.65	142	6	*****				
28.75	86	4	*****				
28.85	60	2	*****				
28.95	0	0					

NO. OF SAMPLES OVER 29.00 = 0

NO. OF SAMPLES UNDER 25.00 = 1

TOTAL NO. OF OBSERVATIONS = 2426

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 10 M.

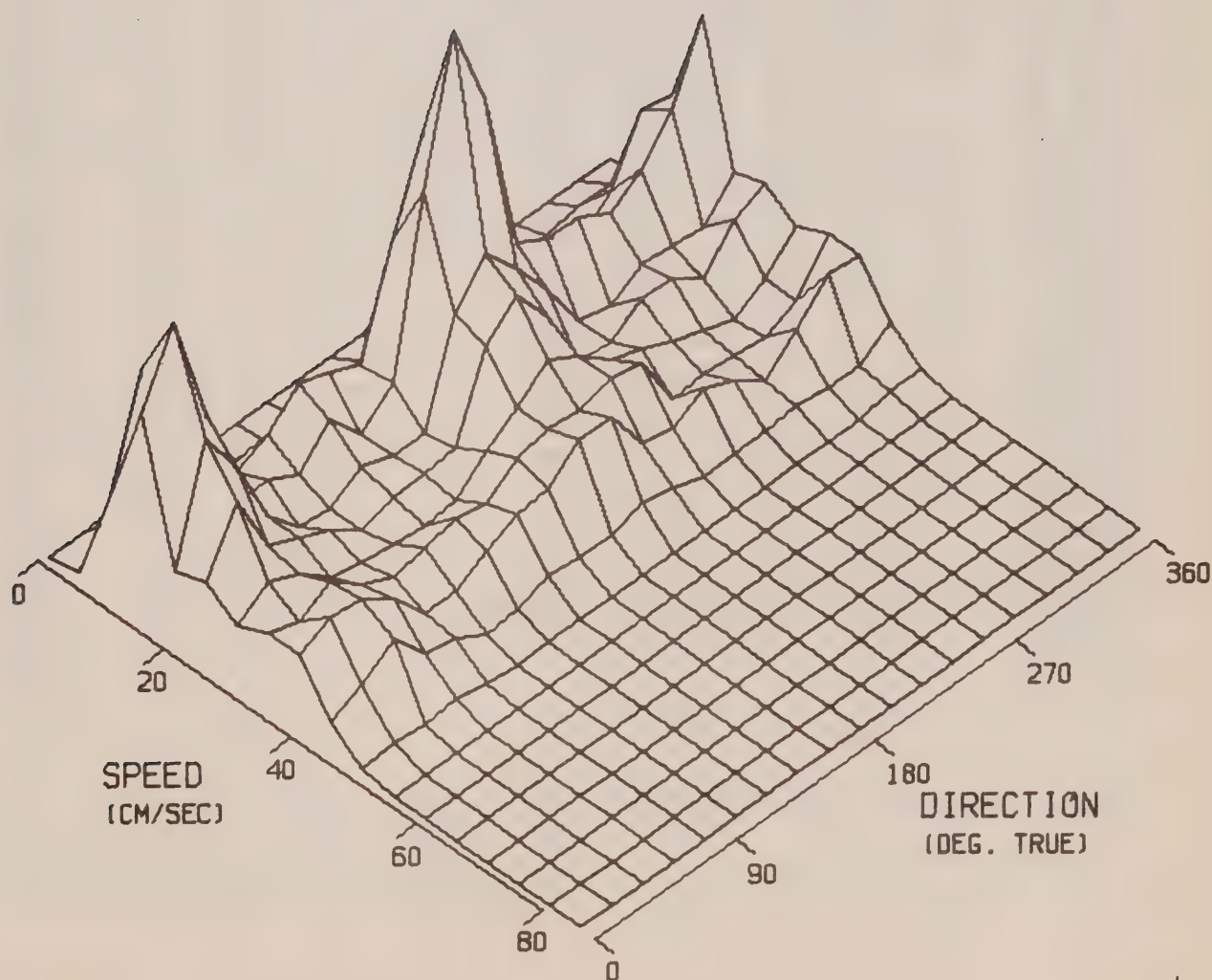
STARTING DATE: 21/ 9/73    ENDING DATE: 11/10/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 21/ 9/73

NO. OF SAMPLES = 2875





STN. NO. HS-5N

DEPTH 10 M.

STARTING DATE: 21/ 9/73

SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	001	066	035	020	020	020	001						163
15- 29	011	094	067	040	025	021	001						259
30- 44	005	068	043	026	027	021	002						192
45- 59	003	035	025	017	028	017	002						127
60- 74	001	019	016	022	012	018							88
75- 89		019	010	013	009	007							58
90-104	001	013	012	008	012	007							53
105-119	002	028	011	011	018	008							78
120-134	002	023	009	013	014	005							66
135-149	001	019	013	007	017	018							75
150-164	001	018	011	016	018	004							68
165-179	004	035	034	027	026	018							144
180-194	006	079	068	033	034	014							234
195-209	005	115	059	045	028	012							264
210-224	003	087	053	036	017	007							203
225-239	005	038	030	020	029	010							132
240-254	002	027	025	015	017	005							91
255-269	002	022	016	012	017	005							74
270-284	004	018	012	015	012	007							68
285-299	001	024	015	018	005	007							70
300-314	002	014	018	012	010	003							59
315-329	005	034	015	007	007	008							76
330-344	007	037	015	015	016	008	001						99
345-359	003	047	022	022	027	013							134
	77	634		445		7		0	0	0			2875
	979		470		263		0	0	0		0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M, START DATE 21/09/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	60	120	180	240	300
7	0	0	.	.	.	.	.
21	0	0					
35	5	0	*				
49	18	1	***				
63	29	1	*****				
77	52	2	*****				
91	138	5	*****				
105	161	6	*****				
119	216	8	*****				
133	175	6	*****				
147	218	8	*****				
161	137	5	*****				
175	110	4	*****				
189	131	5	*****				
203	99	3	*****				
217	105	4	*****				
231	97	3	*****				
245	89	3	*****				
259	87	3	*****				
273	82	3	*****				
287	82	3	*****				
301	63	2	*****				
315	92	3	*****				
329	80	3	*****				
343	57	2	*****				
357	107	4	*****				
371	52	2	*****				
385	108	4	*****				
399	54	2	*****				
413	74	3	*****				
427	64	2	*****				
441	36	1	*****				
455	30	1	*****				
469	15	1	***				
483	10	0	**				
497	2	0					
511	1	0					
525	0	0					
539	0	0					
553	0	0					

NO. OF SAMPLES OVER 540 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2878  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M. START DATE 21/09/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	120	4	*****				
15	148	5	*****				
25	166	6	*****				
35	138	5	*****				
45	104	4	*****				
55	74	3	*****				
65	56	2	*****				
75	54	2	*****				
85	32	1	*****				
95	37	1	*****				
105	37	1	*****				
115	56	2	*****				
125	49	2	*****				
135	38	1	*****				
145	57	2	*****				
155	48	2	*****				
165	66	2	*****				
175	113	4	*****				
185	143	5	*****				
195	184	6	*****				
205	161	6	*****				
215	147	5	*****				
225	105	4	*****				
235	81	3	*****				
245	64	2	*****				
255	53	2	*****				
265	49	2	*****				
275	44	2	*****				
285	52	2	*****				
295	36	1	*****				
305	43	1	*****				
315	42	1	*****				
325	51	2	*****				
335	70	2	*****				
345	78	3	*****				
355	82	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2878  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M, START DATE 21/09/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	60	120	180	240	300
9.34	6	0	*	.	.	.	.
9.42	6	0	*				
9.50	9	0	**				
9.58	12	0	**				
9.66	41	1	*****				
9.74	35	1	*****				
9.82	65	2	*****				
9.90	69	2	*****				
9.98	104	4	*****				
10.06	73	3	*****				
10.14	132	5	*****				
10.22	108	4	*****				
10.30	184	6	*****				
10.38	88	3	*****				
10.46	181	6	*****				
10.54	242	8	*****				
10.62	164	6	*****				
10.70	223	8	*****				
10.78	159	6	*****				
10.86	216	8	*****				
10.94	134	5	*****				
11.02	117	4	*****				
11.10	85	3	*****				
11.18	103	4	*****				
11.26	42	1	*****				
11.34	38	1	*****				
11.42	62	2	*****				
11.50	33	1	*****				
11.58	38	1	*****				
11.66	20	1	***				
11.74	20	1	***				
11.82	27	1	*****				
11.90	9	0	**				
11.98	17	1	***				
12.06	4	0	*				
12.14	3	0	*				
12.22	1	0					
12.30	3	0	*				
12.38	0	0					
12.46	3	0	*				

NO. OF SAMPLES OVER 12.50 = 2  
 NO. OF SAMPLES UNDER 9.30 = 0  
 TOTAL NO. OF OBSERVATIONS = 2878  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 10M, START DATE 21/09/73

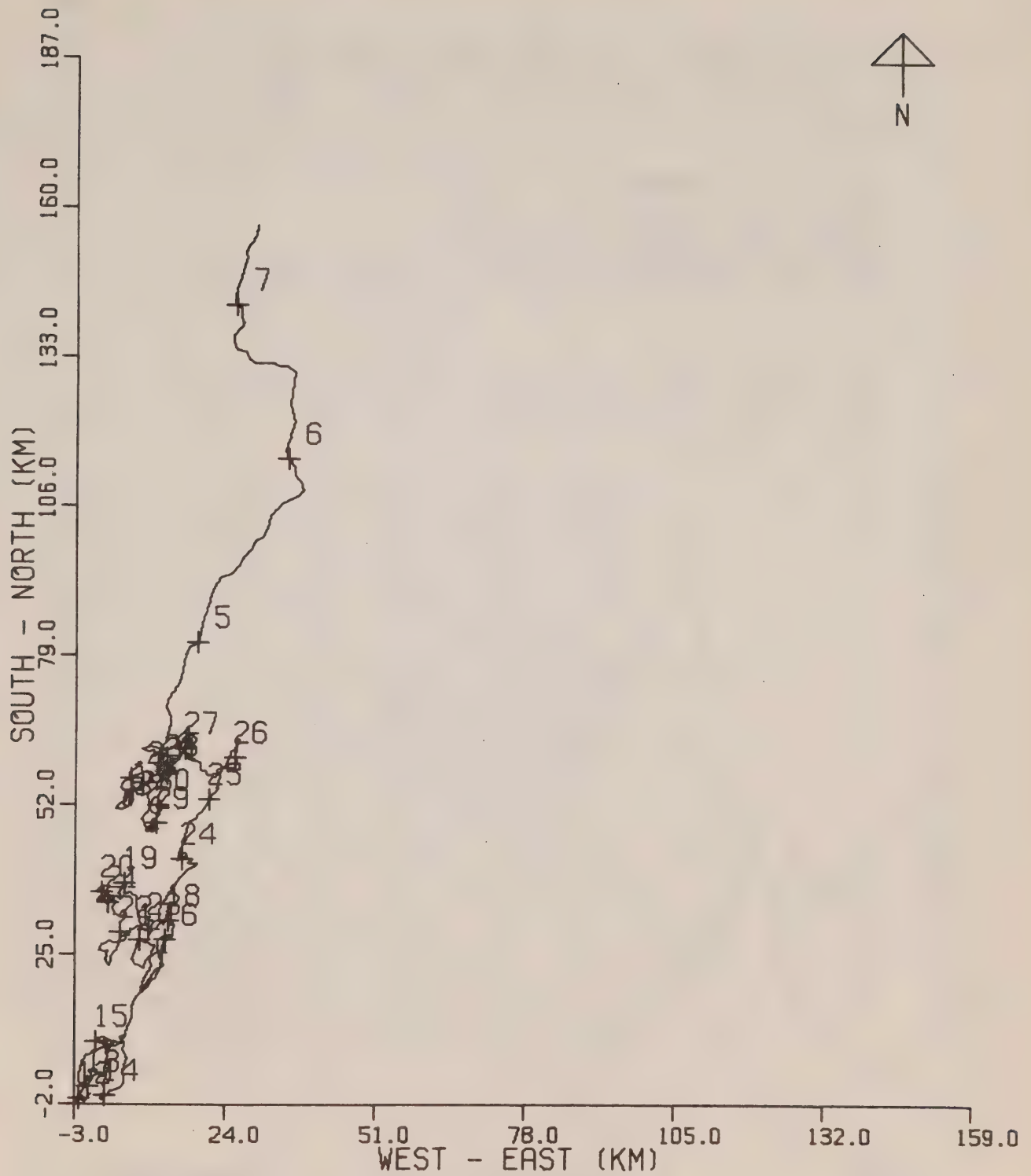
MEDIAN (PPT)	FREQUENCY NO, PCT	70	140	210	280	350
25.45	2 0	.	.	.	.	.
25.55	3 0					
25.65	3 0					
25.75	4 0 *					
25.85	4 0 *					
25.95	3 0					
26.05	3 0					
26.15	7 0 *					
26.25	5 0 *					
26.35	6 0 *					
26.45	10 0 *					
26.55	5 0 *					
26.65	3 0					
26.75	16 1 **					
26.85	23 1 ***					
26.95	27 1 ****					
27.05	30 1 ****					
27.15	29 1 ****					
27.25	17 1 **					
27.35	26 1 ****					
27.45	35 1 *****					
27.55	38 1 *****					
27.65	64 2 *****					
27.75	55 2 *****					
27.85	77 3 *****					
27.95	82 3 *****					
28.05	171 6 *****					
28.15	276 10 *****					
28.25	262 9 *****					
28.35	313 11 *****					
28.45	218 8 *****					
28.55	330 11 *****					
28.65	249 9 *****					
28.75	171 6 *****					
28.85	116 4 *****					
28.95	77 3 *****					
29.05	64 2 *****					
29.15	30 1 ****					
29.25	9 0 *					
29.35	4 0 *					

NO. OF SAMPLES OVER 29.40 = 0

NO. OF SAMPLES UNDER 25.40 = 11

TOTAL NO. OF OBSERVATIONS = 2878

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 10 M.

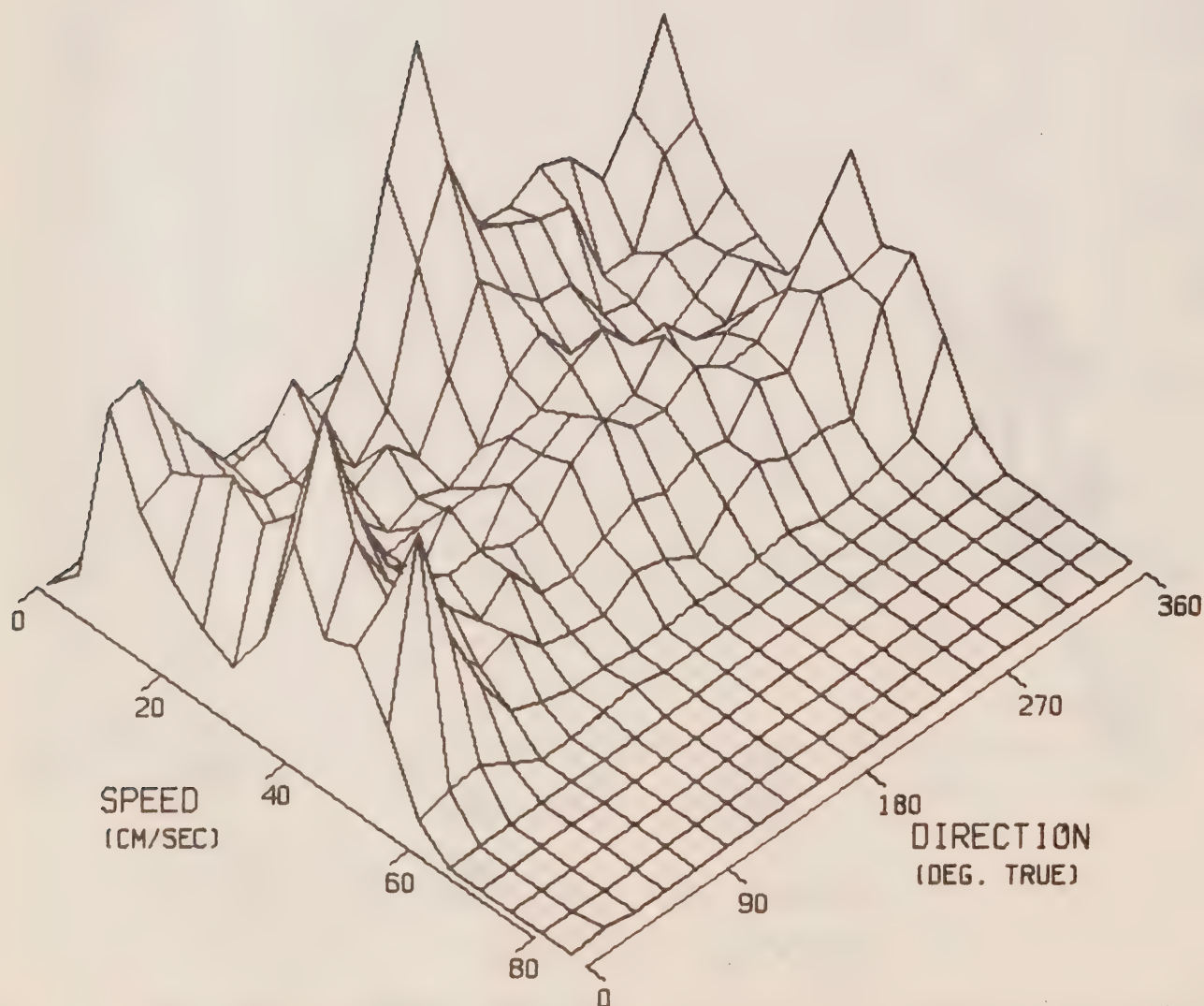
STARTING DATE: 11/10/73    ENDING DATE: 7/11/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 11/10/73

NO. OF SAMPLES = 3912



STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 11/10/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED												
	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	007	061	028	027	045	061	043	009					281
15- 29	013	060	045	054	060	074	063	020		001			390
30- 44	009	038	033	040	034	055	054	008					271
45- 59	007	027	026	023	028	033	040	007					191
60- 74	007	028	009	018	022	039	019	004					146
75- 89	003	018	014	022	022	023	010	001					113
90-104	006	019	012	021	017	021	009						105
105-119		023	014	011	019	018	008	001					94
120-134	005	029	019	013	025	016	004	001					112
135-149	005	013	014	015	004	010	004	002					67
150-164	003	019	015	011	018	016	002						84
165-179	011	051	021	021	020	013	004						141
180-194	006	076	034	018	033	015	005						187
195-209	003	089	050	026	030	021	005						224
210-224	005	066	037	035	016	021	001						181
225-239	005	046	033	032	025	019	002						162
240-254	007	045	022	029	021	026	006						156
255-269	005	041	025	028	030	022	007						158
270-284	005	045	015	022	014	025	004						130
285-299	001	032	010	013	025	028	008						117
300-314	008	032	009	015	019	026	005						114
315-329	005	021	017	014	021	038	007						123
330-344	006	040	016	026	019	042	026	001					176
345-359	005	045	020	019	022	044	028	006					189
	137		538		589		364		0		1		3912
		964		553		706		60		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M, START DATE 11/10/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT .	60	120	180	240	300
8	0	0	.	.	.	.	.
24	1	0					
40	7	0	*				
56	36	1	*****				
72	93	2	*****				
88	176	4	*****				
104	268	7	*****				
120	197	5	*****				
136	163	4	*****				
152	160	4	*****				
168	119	3	*****				
184	159	4	*****				
200	102	3	*****				
216	99	3	*****				
232	85	2	*****				
248	86	2	*****				
264	97	2	*****				
280	112	3	*****				
296	103	3	*****				
312	130	3	*****				
328	109	3	*****				
344	108	3	*****				
360	112	3	*****				
376	143	4	*****				
392	159	4	*****				
408	138	4	*****				
424	144	4	*****				
440	155	4	*****				
456	117	3	*****				
472	110	3	*****				
488	96	2	*****				
504	75	2	*****				
520	81	2	*****				
536	70	2	*****				
552	46	1	*****				
568	24	1	***				
584	19	0	***				
600	12	0	**				
616	1	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 1  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3913  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M. START DATE 11/10/73

MEDIAN (DEG.T)	FREQUNCY NO.	PCT		60	120	180	240	300
5	185	5	*****					
15	237	6	*****					
25	270	7	*****					
35	193	5	*****					
45	141	4	*****					
55	117	3	*****					
65	112	3	*****					
75	75	2	*****					
85	70	2	*****					
95	76	2	*****					
105	57	1	*****					
115	62	2	*****					
125	79	2	*****					
135	58	1	*****					
145	44	1	*****					
155	52	1	*****					
165	61	2	*****					
175	118	3	*****					
185	110	3	*****					
195	161	4	*****					
205	144	4	*****					
215	114	3	*****					
225	116	3	*****					
235	104	3	*****					
245	107	3	*****					
255	106	3	*****					
265	107	3	*****					
275	87	2	*****					
285	85	2	*****					
295	69	2	*****					
305	73	2	*****					
315	80	2	*****					
325	85	2	*****					
335	118	3	*****					
345	118	3	*****					
355	122	3	*****					
365	0	0						
375	0	0						
385	0	0						
395	0	0						

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3913  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M, START DATE 11/10/73

MEDIAN (DEG.C)	FREQNCY NO.	PCT	140	280	420	560	700
7.95	6	0	.	.	.	.	.
8.05	12	0	*				
8.15	27	1	**				
8.25	47	1	***				
8.35	45	1	***				
8.45	100	3	*****				
8.55	100	3	*****				
8.65	59	2	****				
8.75	74	2	*****				
8.85	90	2	*****				
8.95	78	2	*****				
9.05	80	2	*****				
9.15	44	1	***				
9.25	41	1	***				
9.35	116	3	*****				
9.45	77	2	*****				
9.55	73	2	*****				
9.65	97	2	*****				
9.75	169	4	*****				
9.85	286	7	*****				
9.95	674	17	*****				
10.05	501	13	*****				
10.15	370	9	*****				
10.25	190	5	*****				
10.35	37	1	***				
10.45	17	0	*				
10.55	38	1	***				
10.65	25	1	**				
10.75	19	0	*				
10.85	27	1	**				
10.95	20	1	*				
11.05	20	1	*				
11.15	56	1	****				
11.25	29	1	**				
11.35	40	1	***				
11.45	56	1	****				
11.55	49	1	****				
11.65	76	2	*****				
11.75	48	1	***				
11.85	0	0					

NO. OF SAMPLES OVER 11.90 = 0

NO. OF SAMPLES UNDER 7.90 = 0

TOTAL NO. OF OBSERVATIONS = 3913

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5N DEPTH 10M, START DATE 11/10/73

MEDIAN (PPT)	FREQUENCY NO.	PCT	70	140	210	280	350
23.09	7	0	*	.	.	.	.
23.27	8	0	*				
23.45	11	0	**				
23.63	8	0	*				
23.81	8	0	*				
23.99	7	0	*				
24.17	8	0	*				
24.35	18	0	***				
24.53	25	1	****				
24.71	16	0	**				
24.89	19	0	***				
25.07	64	2	*****				
25.25	32	1	*****				
25.43	43	1	*****				
25.61	48	1	*****				
25.79	43	1	*****				
25.97	41	1	*****				
26.15	42	1	*****				
26.33	78	2	*****				
26.51	90	2	*****				
26.69	91	2	*****				
26.87	123	3	*****				
27.05	156	4	*****				
27.23	139	4	*****				
27.41	125	3	*****				
27.59	167	4	*****				
27.77	151	4	*****				
27.95	186	5	*****				
28.13	187	5	*****				
28.31	170	4	*****				
28.49	251	6	*****				
28.67	353	9	*****				
28.85	351	9	*****				
29.03	168	4	*****				
29.21	204	5	*****				
29.39	106	3	*****				
29.57	140	4	*****				
29.75	61	2	*****				
29.93	114	3	*****				
30.11	8	0	*				

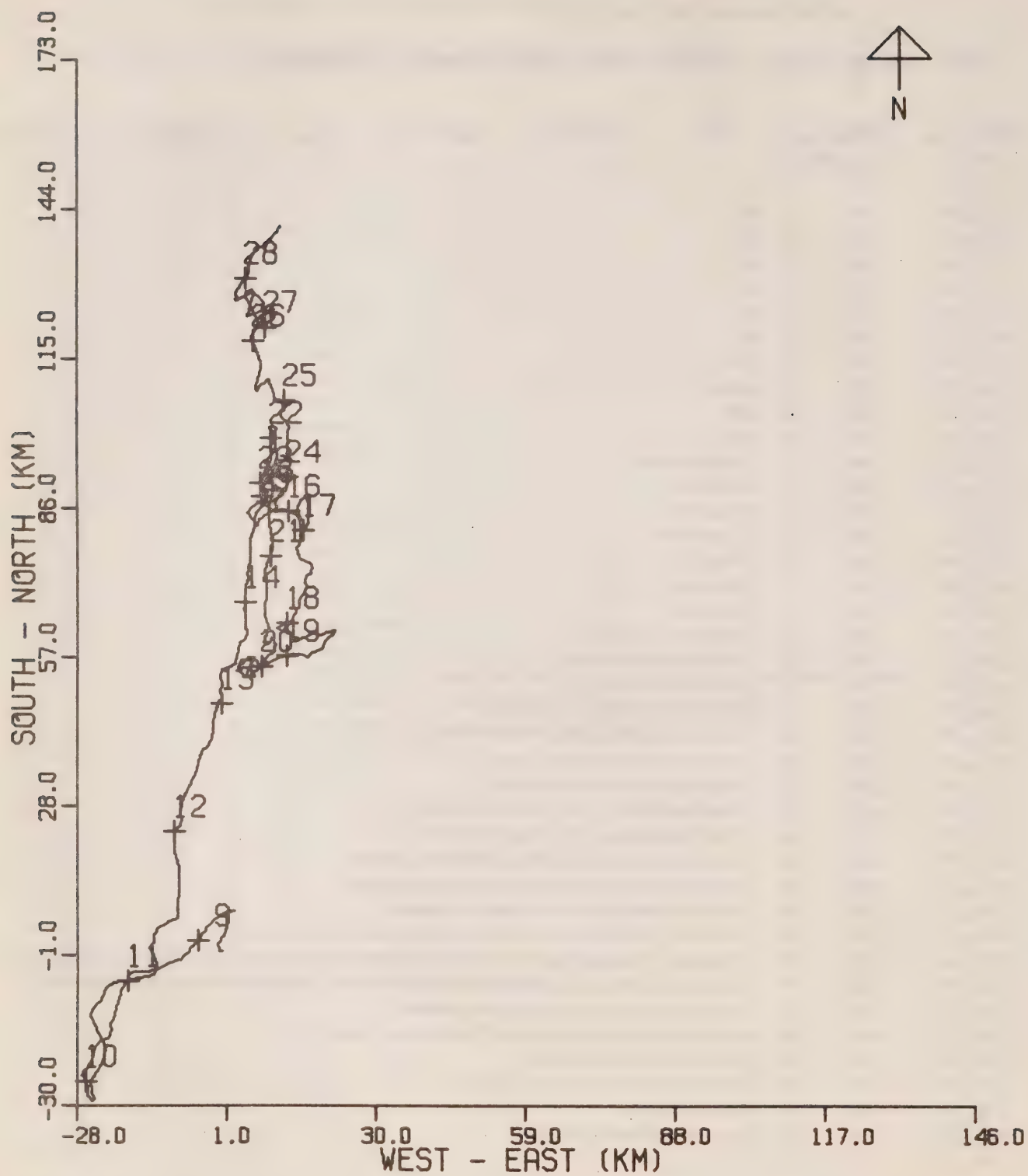
NO. OF SAMPLES OVER 30.20 = 0

NO. OF SAMPLES UNDER 23.00 = 46

TOTAL NO. OF OBSERVATIONS = 3913

SAMPLE INTERVAL = 10 MINUTES





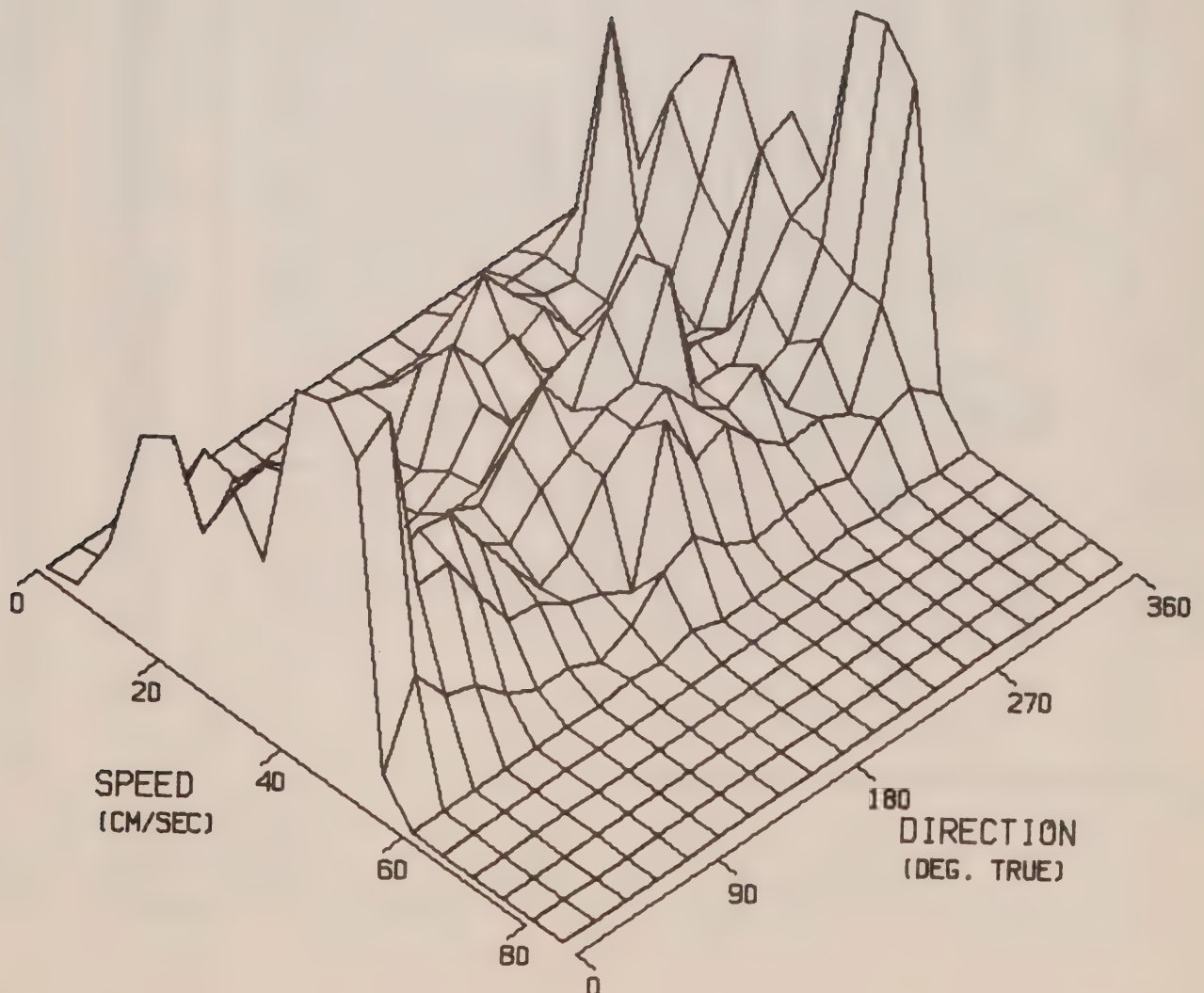
STN. NO. HS-5N

DEPTH 10 M.

STARTING DATE: 8/11/73    ENDING DATE: 28/11/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.  
STARTING DATE: 8/11/73  
NO. OF SAMPLES = 2871



STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 8/11/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO
DIR	079	159	239	319	399	479	559	639	719	799	879	959

0-14	001	030	028	051	066	105	042					323
15-29		021	018	043	053	072	063	002				272
30-44	002	026	030	038	030	039	031					196
45-59	001	019	012	006	016	040	032	003				129
60-74	001	006	006	003	014	035	024					89
75-89		007	005	002	011	037	020					82
90-104		007	001	002	008	029	013	001				61
105-119		010	001	003	020	020	006	001				61
120-134		010	001	003	014	017	006	001				52
135-149	001	003	003	007	014	008	004					40
150-164		013	001	009	019	010	008					60
165-179		007	021	021	031	017	001	002				100
180-194	001	015	013	018	027	024	018	001				117
195-209			013	019	025	031	025					113
210-224		006	010	021	028	032	021					118
225-239	002	005	012	021	041	038	021					140
240-254	005	028	007	022	047	026	010		001			146
255-269		003	006	007	020	019	014					69
270-284	002	003	003	004	008	017	010	002				49
285-299	001	003	003	011	017	018	010					63
300-314	005	011		002		010	008					36
315-329	011	047	004	006	020	022	012	003				125
330-344	001	031	023	023	027	031	023	001				160
345-359	001	032	050	050	037	055	041	001				267
	35		271		593		463		1		0	2868
		343		392		752		18		0		0

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 3

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M, START DATE 08/11/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	40	80	120	160	200
8	0	0	.	.	.	.	.
24	2	0	*				
40	2	0	*				
56	14	0	****				
72	17	1	****				
88	28	1	*****				
104	75	3	*****				
120	104	4	*****				
136	87	3	*****				
152	49	2	*****				
168	37	1	*****				
184	56	2	*****				
200	71	2	*****				
216	64	2	*****				
232	51	2	*****				
248	41	1	*****				
264	60	2	*****				
280	90	3	*****				
296	91	3	*****				
312	102	4	*****				
328	103	4	*****				
344	130	5	*****				
360	135	5	*****				
376	131	5	*****				
392	136	5	*****				
408	94	3	*****				
424	156	5	*****				
440	163	6	*****				
456	147	5	*****				
472	150	5	*****				
488	147	5	*****				
504	128	4	*****				
520	88	3	*****				
536	71	2	*****				
552	34	1	*****				
568	8	0	**				
584	3	0	*				
600	2	0	*				
616	0	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 4

NO. OF SAMPLES UNDER 0 = 0

TOTAL NO. OF OBSERVATIONS = 2871

SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M, START DATE 08/11/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	227	8	*****				
15	220	8	*****				
25	159	6	*****				
35	129	4	*****				
45	114	4	*****				
55	76	3	*****				
65	62	2	*****				
75	60	2	*****				
85	44	2	*****				
95	41	1	*****				
105	35	1	*****				
115	41	1	*****				
125	37	1	*****				
135	32	1	*****				
145	26	1	*****				
155	41	1	*****				
165	42	1	*****				
175	82	3	*****				
185	74	3	*****				
195	79	3	*****				
205	75	3	*****				
215	71	2	*****				
225	100	3	*****				
235	86	3	*****				
245	103	4	*****				
255	73	3	*****				
265	37	1	*****				
275	29	1	*****				
285	50	2	*****				
295	31	1	*****				
305	22	1	****				
315	69	2	*****				
325	79	3	*****				
335	114	4	*****				
345	129	4	*****				
355	174	6	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2871  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M. START DATE 08/11/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
7.42	5	0	.	.	.	.	.
7.46	1	0					
7.50	11	0	**				
7.54	15	1	***				
7.58	24	1	*****				
7.62	13	0	***				
7.66	28	1	*****				
7.70	28	1	*****				
7.74	23	1	*****				
7.78	23	1	*****				
7.82	51	2	*****				
7.86	41	1	*****				
7.90	53	2	*****				
7.94	34	1	*****				
7.98	130	5	*****				
8.02	211	7	*****				
8.06	209	7	*****				
8.10	104	4	*****				
8.14	128	4	*****				
8.18	126	4	*****				
8.22	135	5	*****				
8.26	163	6	*****				
8.30	85	3	*****				
8.34	140	5	*****				
8.38	133	5	*****				
8.42	185	6	*****				
8.46	70	2	*****				
8.50	101	4	*****				
8.54	75	3	*****				
8.58	83	3	*****				
8.62	34	1	*****				
8.66	112	4	*****				
8.70	54	2	*****				
8.74	68	2	*****				
8.78	24	1	*****				
8.82	45	2	*****				
8.86	48	2	*****				
8.90	14	0	***				
8.94	10	0	**				
8.98	31	1	*****				

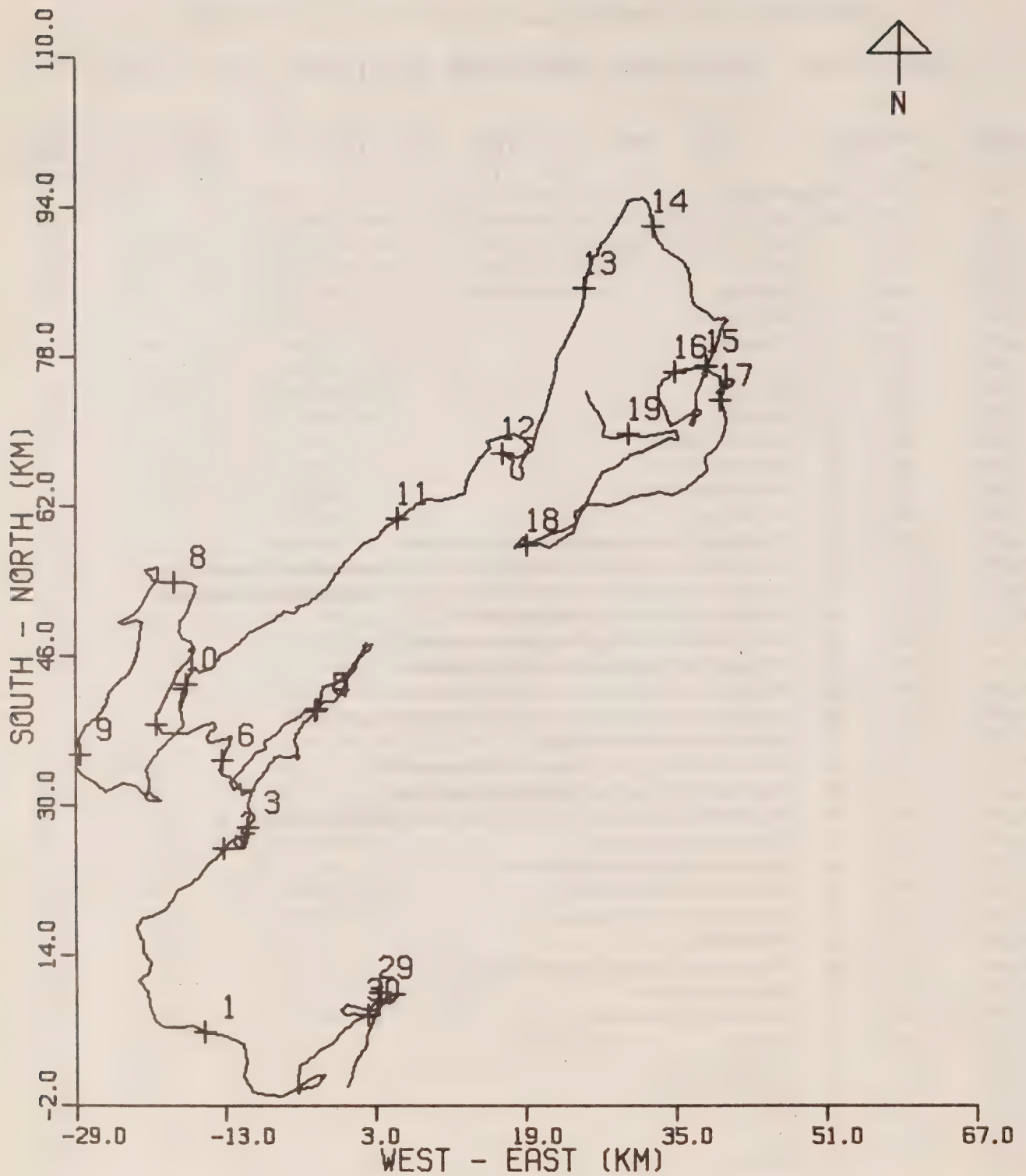
NO. OF SAMPLES OVER 9.00 = 2

NO. OF SAMPLES UNDER 7.40 = 1

TOTAL NO. OF OBSERVATIONS = 2871

SAMPLE INTERVAL = 10 MINUTES

LEASED.



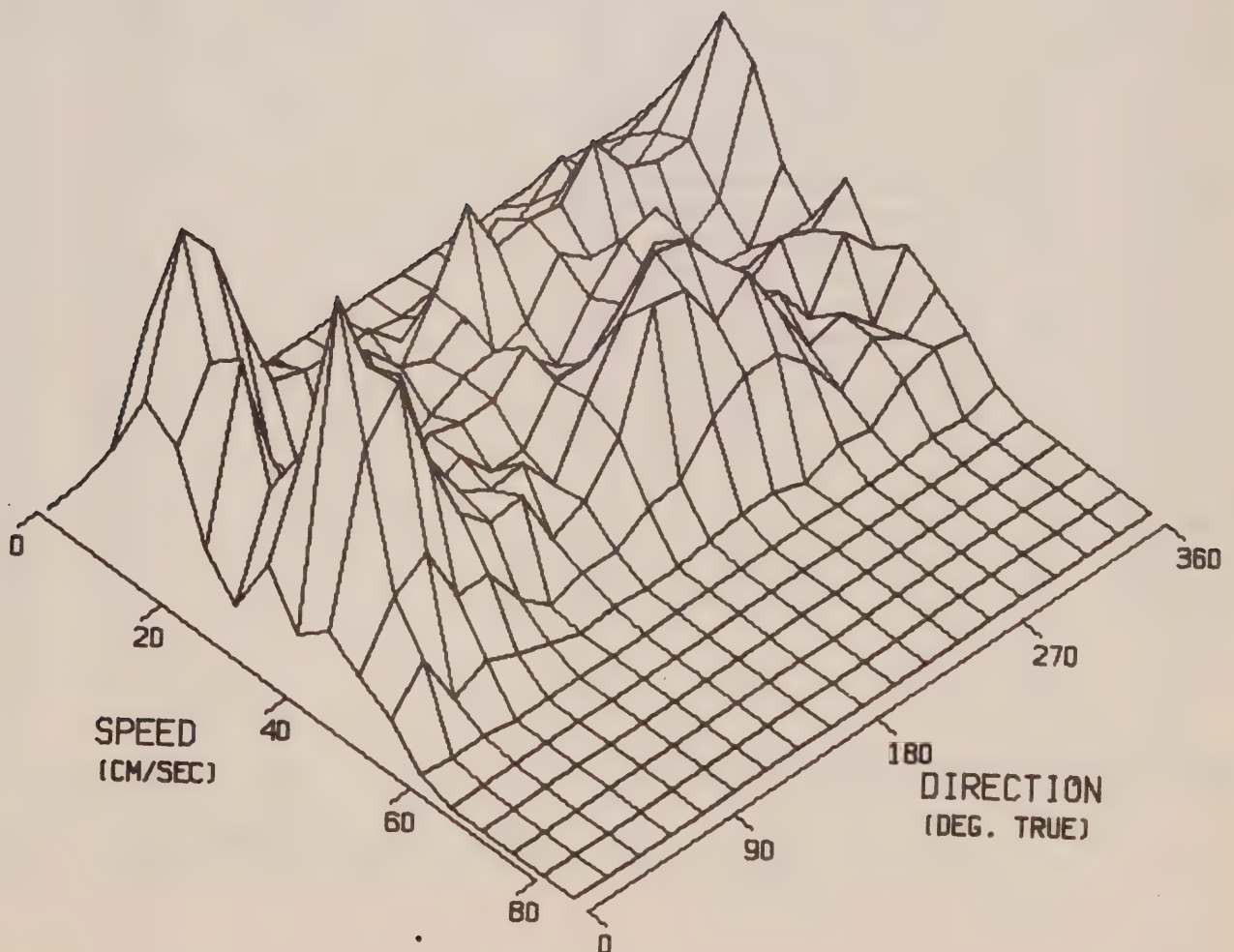
STN. NO. HS-5N

DEPTH 10 M.

STARTING DATE: 28/11/73    ENDING DATE: 19/12/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.  
STARTING DATE: 28/11/73  
NO. OF SAMPLES = 3000





STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 28/11/73

SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0-14	006	037	049	022	036	027	018	003					198
15-29	007	066	055	036	058	072	026	002					322
30-44	001	057	052	024	050	069	019	001					273
45-59		041	025	016	045	059	016	001					203
60-74	003	035	008	013	036	038	015						148
75-89	001	029	008	012	026	028	012						116
90-104	001	022	007	008	014	014	008						74
105-119	001	025	028	016	022	024	002						118
120-134	002	013	013	014	011	014	001						68
135-149	002	010	016	013	014	011	003						69
150-164	001	007	019	016	009	007	002						61
165-179	002	005	019	026	016	018	002						88
180-194		013	018	013	020	026	006						96
195-209	001	022	013	014	028	042	004						124
210-224	001	018	008	008	036	046	012	001					130
225-239		015	014	006	034	041	010						120
240-254	001	023	021	026	033	037	019						160
255-269		011	016	027	024	035	012						125
270-284	005	021	010	029	022	026	011						124
285-299	003	020	015	014	019	016	005						92
300-314	007	007	004	008	015	013	008						62
315-329	003	011	005	006	012	011	012	001					61
330-344	004	015	013	005	017	010	014	002					80
345-359	007	022	016	007	013	013	008	002					88
	59	452	610	245				0	0	0			3000
	545	379	697	13				0	0	0			

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M START DATE 28/11/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	40	80	120	160	200
8	0	0	.	.	.	.	.
24	0	0					
40	9	0	**				
56	24	1	*****				
72	26	1	*****				
88	62	2	*****				
104	89	3	*****				
120	117	4	*****				
136	139	5	*****				
152	138	5	*****				
168	129	4	*****				
184	103	3	*****				
200	80	3	*****				
216	80	3	*****				
232	80	3	*****				
248	61	2	*****				
264	70	2	*****				
280	59	2	*****				
296	85	3	*****				
312	84	3	*****				
328	102	3	*****				
344	129	4	*****				
360	134	4	*****				
376	132	4	*****				
392	146	5	*****				
408	110	4	*****				
424	154	5	*****				
440	150	5	*****				
456	130	4	*****				
472	120	4	*****				
488	92	3	*****				
504	63	2	*****				
520	44	1	*****				
536	31	1	*****				
552	20	1	*****				
568	3	0	*				
584	4	0	*				
600	1	0					
616	0	0					
632	0	0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M START DATE 28/11/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	126	4	*****				
15	168	6	*****				
25	246	8	*****				
35	199	7	*****				
45	147	5	*****				
55	123	4	*****				
65	96	3	*****				
75	78	3	*****				
85	83	3	*****				
95	46	2	*****				
105	65	2	*****				
115	85	3	*****				
125	39	1	*****				
135	46	2	*****				
145	48	2	*****				
155	37	1	*****				
165	48	2	*****				
175	67	2	*****				
185	67	2	*****				
195	61	2	*****				
205	92	3	*****				
215	90	3	*****				
225	75	3	*****				
235	86	3	*****				
245	112	4	*****				
255	100	3	*****				
265	67	2	*****				
275	85	3	*****				
285	80	3	*****				
295	53	2	*****				
305	39	1	*****				
315	38	1	*****				
325	50	2	*****				
335	51	2	*****				
345	50	2	*****				
355	57	2	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS=5N DEPTH 10M START DATE 28/11/73

MEDIAN (DEG.C)	FREQNCY NO.	PCT	80	160	240	320	400
6.63	0	0	.	.	.	.	.
6.69	0	0					
6.75	3	0					
6.81	6	0	*				
6.87	28	1	*****				
6.93	25	1	***				
6.99	88	3	*****				
7.05	91	3	*****				
7.11	112	4	*****				
7.17	226	8	*****				
7.23	137	5	*****				
7.29	59	2	*****				
7.35	68	2	*****				
7.41	70	2	*****				
7.47	52	2	*****				
7.53	100	3	*****				
7.59	72	2	*****				
7.65	33	1	****				
7.71	77	3	*****				
7.77	58	2	*****				
7.83	67	2	*****				
7.89	74	2	*****				
7.95	59	2	*****				
8.01	103	3	*****				
8.07	73	2	*****				
8.13	93	3	*****				
8.19	132	4	*****				
8.25	144	5	*****				
8.31	104	3	*****				
8.37	297	10	*****				
8.43	133	4	*****				
8.49	99	3	*****				
8.55	106	4	*****				
8.61	124	4	*****				
8.67	87	3	*****				
8.73	0	0					
8.79	0	0					
8.85	0	0					
8.91	0	0					
8.97	0	0					

NO. OF SAMPLES OVER 9.00 = 0  
 NO. OF SAMPLES UNDER 6.60 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES





DEPTH 10 M.

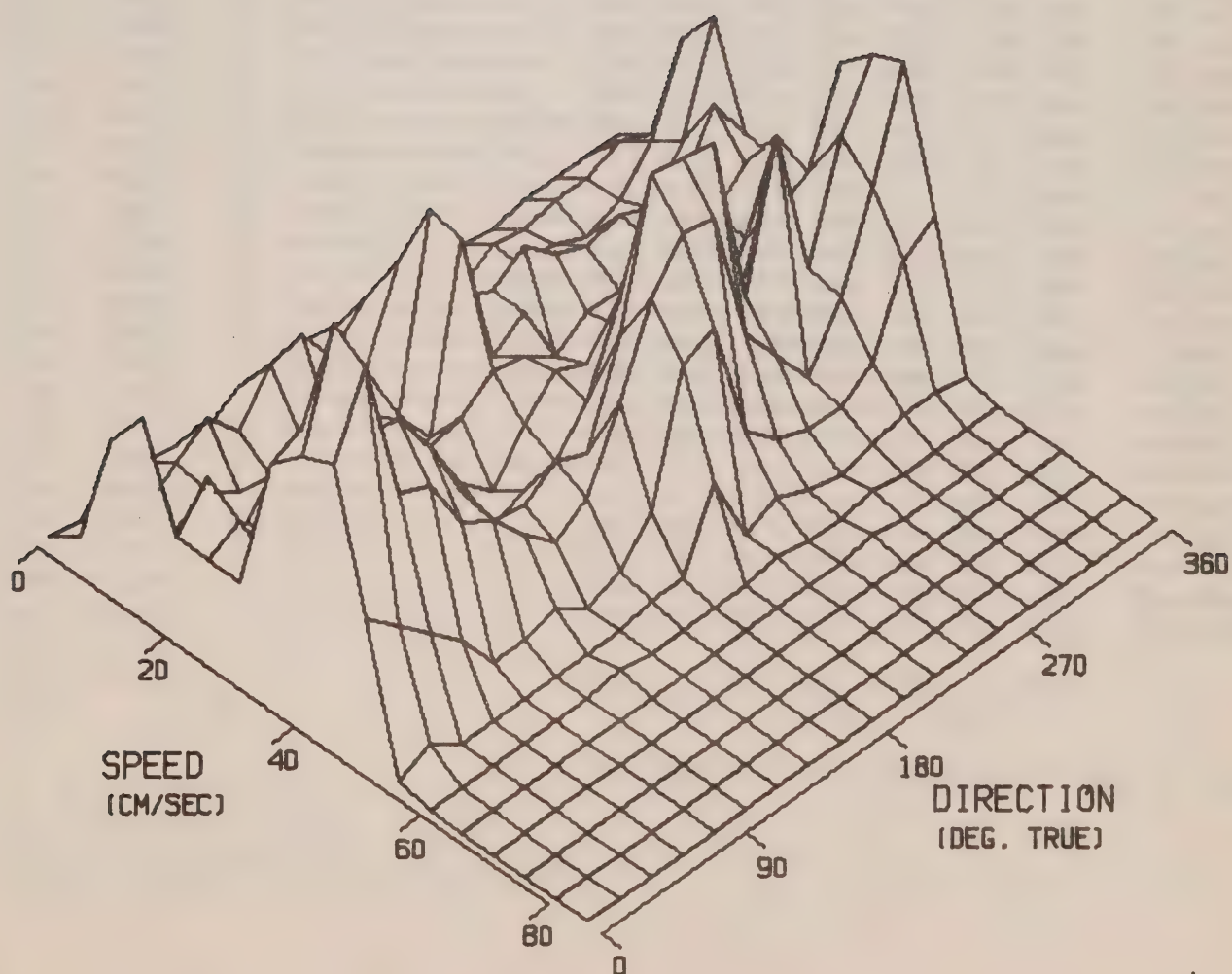
STARTING DATE: 19/12/73      ENDING DATE: 3/ 1/74

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 19/12/73

NO. OF SAMPLES = 2196



STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 19/12/73

SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	004	019	023	019	036	054	007						162
15- 29	004	012	020	014	047	057	012						166
30- 44	007	002	007	010	024	043	008						101
45- 59	003	002	005	017	035	025	005						92
60- 74	007	002	007	021	032	035	002						106
75- 89	005	003	016	021	014	025	002						86
90-104	004	006	009	011	009	020	002						61
105-119	006		005	010	010	015	002	001					49
120-134	011	001	005	008	005	012	001						43
135-149	008			006	007	006							27
150-164	008	004	003	006	006	010	002	001					40
165-179	008	010	010	004	007	014	004						57
180-194	007	030	033	016	015	016	008	001					126
195-209	008	010	008	015	014	036	027	002					120
210-224	002	004	011	013	024	048	019	001					122
225-239	007	010	003	008	026	050	007	002					113
240-254	007	009	003	004	022	045	002	002					94
255-269	003	005	008	004	029	028	006						83
270-284	003	005	005	010	021	017	001	001					63
285-299	004	006	009	013	014	012	002						60
300-314	004	004	011	005	019	020	004						67
315-329	003	005	016	015	018	013	005						75
330-344	006	009	024	017	024	028	009						117
345-359	004	025	016	019	033	048	021						166
	133		257		491		158		0		0		2196
		183		286		677		11		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5N DEPTH 10M START DATE 19/12/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	40	80	120	160	200
8	11	1	***	.	.	.	.
24	31	1	*****				
40	29	1	*****				
56	28	1	*****				
72	34	2	*****				
88	35	2	*****				
104	32	1	*****				
120	25	1	*****				
136	45	2	*****				
152	46	2	*****				
168	53	2	*****				
184	46	2	*****				
200	48	2	*****				
216	62	3	*****				
232	67	3	*****				
248	52	2	*****				
264	58	3	*****				
280	54	2	*****				
296	53	2	*****				
312	50	2	*****				
328	67	3	*****				
344	84	4	*****				
360	110	5	*****				
376	124	6	*****				
392	129	6	*****				
408	122	6	*****				
424	155	7	*****				
440	143	7	*****				
456	127	6	*****				
472	107	5	*****				
488	64	3	*****				
504	58	3	*****				
520	19	1	*****				
536	12	1	***				
552	9	0	**				
568	3	0	*				
584	2	0	*				
600	1	0					
616	0	0					
632	1	0					

NO. OF SAMPLES OVER 640 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2196  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M START DATE 19/12/73

MEDIAN (DEG.T)	FREQUENCY NO. PCT	30	60	90	120	150
5	115 5	*****				
15	113 5	*****				
25	107 5	*****				
35	72 3	*****				
45	54 2	*****				
55	70 3	*****				
65	75 3	*****				
75	57 3	*****				
85	58 3	*****				
95	44 2	*****				
105	28 1	*****				
115	30 1	*****				
125	32 1	*****				
135	19 1	*****				
145	22 1	*****				
155	23 1	*****				
165	29 1	*****				
175	50 2	*****				
185	90 4	*****				
195	90 4	*****				
205	63 3	*****				
215	91 4	*****				
225	76 3	*****				
235	65 3	*****				
245	65 3	*****				
255	68 3	*****				
265	45 2	*****				
275	48 2	*****				
285	32 1	*****				
295	41 2	*****				
305	47 2	*****				
315	45 2	*****				
325	54 2	*****				
335	71 3	*****				
345	105 5	*****				
355	102 5	*****				
365	0 0					
375	0 0					
385	0 0					
395	0 0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2196  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M START DATE 19/12/73

MEDIAN (DEG.C)	FREQ NO.	PCT	60	120	180	240	300
7.22	0	0	.	.	.	.	.
7.26	0	0					
7.30	1	0					
7.34	2	0					
7.38	2	0					
7.42	0	0					
7.46	1	0					
7.50	4	0	*				
7.54	26	1	*****				
7.58	31	1	*****				
7.62	10	0	**				
7.66	43	2	*****				
7.70	89	4	*****				
7.74	150	7	*****				
7.78	92	4	*****				
7.82	125	6	*****				
7.86	223	10	*****				
7.90	243	11	*****				
7.94	147	7	*****				
7.98	263	12	*****				
8.02	122	6	*****				
8.06	58	3	*****				
8.10	30	1	*****				
8.14	108	5	*****				
8.18	72	3	*****				
8.22	68	3	*****				
8.26	35	2	*****				
8.30	7	0	*				
8.34	18	1	***				
8.38	18	1	***				
8.42	64	3	*****				
8.46	26	1	****				
8.50	54	2	*****				
8.54	43	2	*****				
8.58	11	1	**				
8.62	8	0	*				
8.66	2	0					
8.70	0	0					
8.74	0	0					
8.78	0	0					

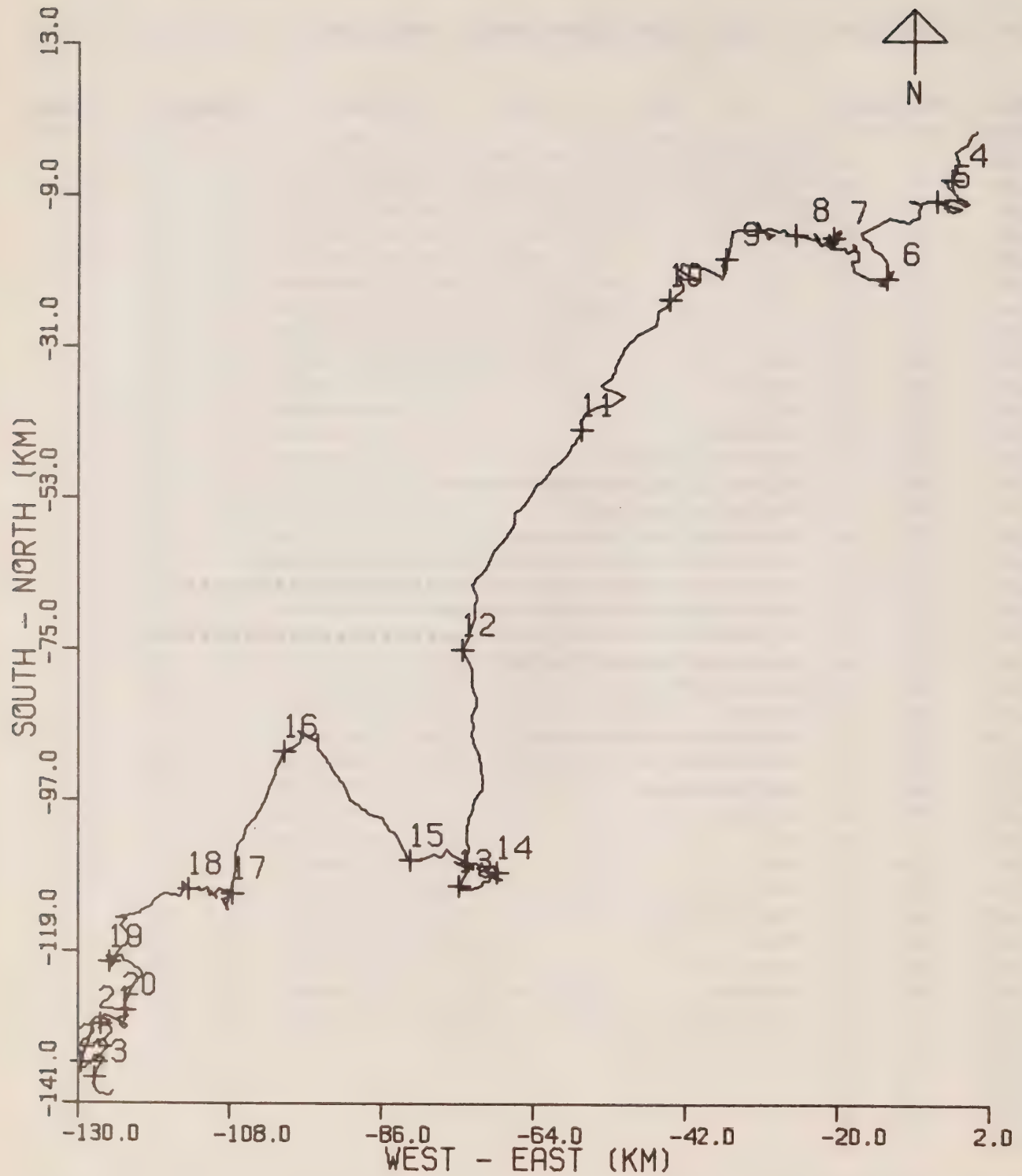
NO. OF SAMPLES OVER 8.80 = 0

NO. OF SAMPLES UNDER 7.20 = 0

TOTAL NO. OF OBSERVATIONS = 2196

SAMPLE INTERVAL = 10 MINUTES

RELEASED.

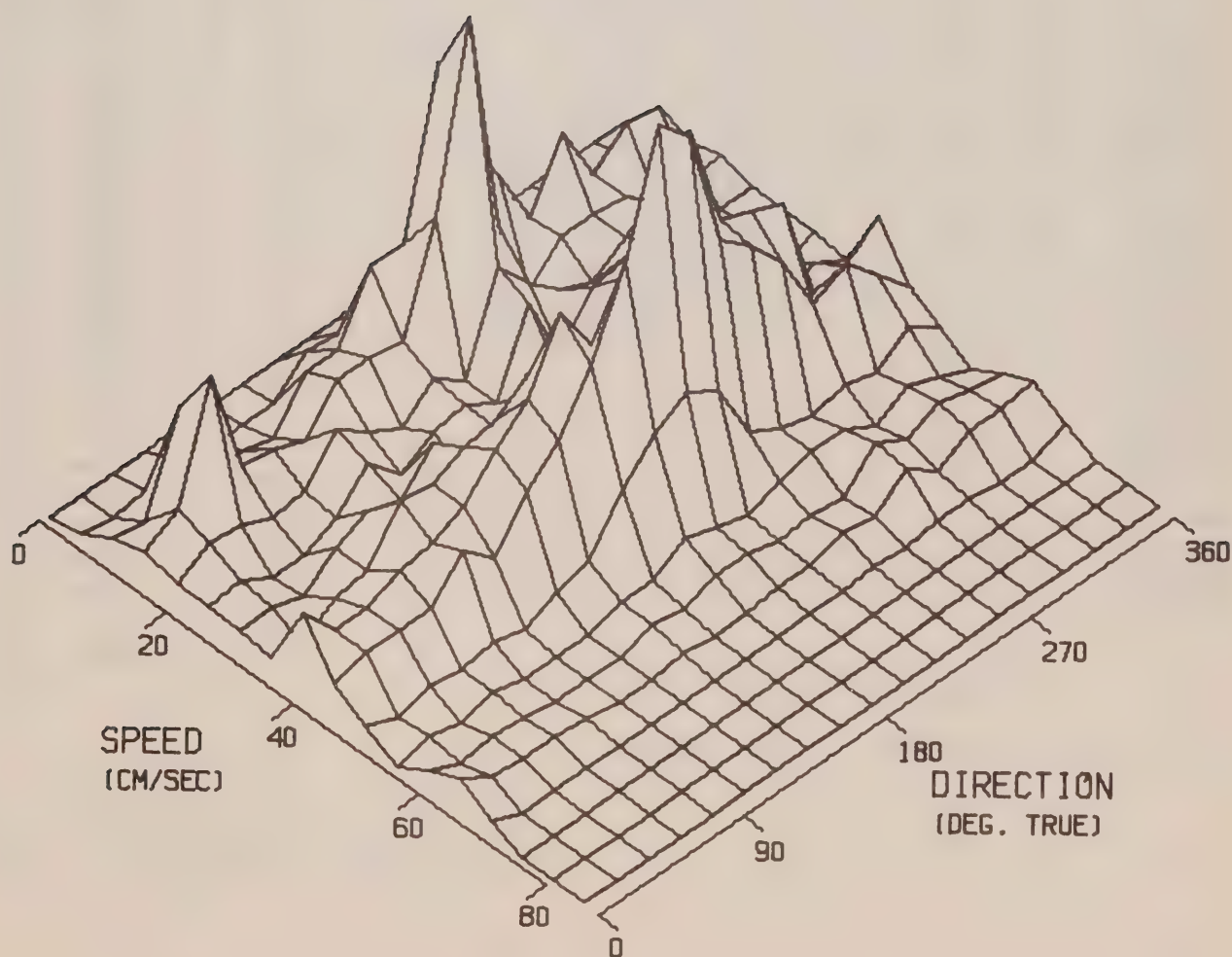


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 3/ 1/74

NO. OF SAMPLES = 2858





STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 3/ 1/74

SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14		005	006	007	006	014	002	001	005				46
15- 29		008	013	002	008	014	001	001	003				50
30- 44		033	016	001	007	013	003	003	001				77
45- 59	004	021	012	005	012	010	003		001				68
60- 74	001	005	006	008	014	016	002	002					54
75- 89	001	011	008	010	019	016	002		001				68
90-104	001	006	015	011	019	014	001						67
105-119	001	011	011	015	023	020	002						83
120-134	002	018	012	011	027	027	004						101
135-149	006	013	012	009	028	029	006	002					105
150-164	007	028	011	013	042	043	009	002					155
165-179	005	022	010	006	020	051	011	004					129
180-194	004	059	018	016	025	064	018	004					208
195-209	012	078	041	017	028	086	020	003					285
210-224	005	045	018	009	044	089	021	001	001				233
225-239	002	027	015	017	030	077	002	004					174
240-254	004	024	007	030	040	053	011	001	003				173
255-269	002	014	015	017	036	053	007	002	001				147
270-284	003	020	020	029	029	042	006	009	004				162
285-299	004	020	021	019	028	036	004	004	002				138
300-314	005	011	014	016	017	029	007	007	003				109
315-329	002	017	012	008	007	022	006	007	003				84
330-344	002	012	005	003	009	019	009	004	003				66
345-359	001	021	004	004	010	015	005	009	004				73
	74	322		528		162		35		0			2855
	529		283		852		70			0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 3

## HISTOGRAM OF SPEED

HOWE SOUND HS=5N DEPTH 10M START DATE 03/01/74

MEDIAN (MM/S)	FREQNCY NO.	PCT	60	120	180	240	300
9	0	0	.	.	.	.	.
27	4	0	*				
45	12	0	**				
63	43	2	*****				
81	85	3	*****				
99	129	5	*****				
117	134	5	*****				
135	102	4	*****				
153	94	3	*****				
171	106	4	*****				
189	64	2	*****				
207	71	2	*****				
225	66	2	*****				
243	60	2	*****				
261	60	2	*****				
279	54	2	*****				
297	72	3	*****				
315	79	3	*****				
333	81	3	*****				
351	122	4	*****				
369	130	5	*****				
387	168	6	*****				
405	170	6	*****				
423	188	7	*****				
441	221	8	*****				
459	180	6	*****				
477	126	4	*****				
495	60	2	*****				
513	26	1	****				
531	33	1	*****				
549	10	0	**				
567	10	0	**				
585	16	1	***				
603	18	1	***				
621	19	1	***				
639	15	1	***				
657	14	0	**				
675	10	0	**				
693	3	0	*				
711	0	0					

NO. OF SAMPLES OVER 720 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2858  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M START DATE 03/01/74

MEDIAN (DEG.T)	FREQUENCY NO.	PCT.	50	100	150	200	250
5	37	1	*****				
15	30	1	*****				
25	34	1	*****				
35	48	2	*****				
45	57	2	*****				
55	38	1	*****				
65	33	1	*****				
75	45	2	*****				
85	46	2	*****				
95	44	2	*****				
105	48	2	*****				
115	58	2	*****				
125	68	2	*****				
135	64	2	*****				
145	78	3	*****				
155	109	4	*****				
165	92	3	*****				
175	87	3	*****				
185	132	5	*****				
195	174	6	*****				
205	191	7	*****				
215	148	5	*****				
225	144	5	*****				
235	112	4	*****				
245	127	4	*****				
255	88	3	*****				
265	103	4	*****				
275	102	4	*****				
285	113	4	*****				
295	84	3	*****				
305	73	3	*****				
315	67	2	*****				
325	48	2	*****				
335	45	2	*****				
345	52	2	*****				
355	39	1	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2858  
 SAMPLE INTERVAL = 10 MINUTES

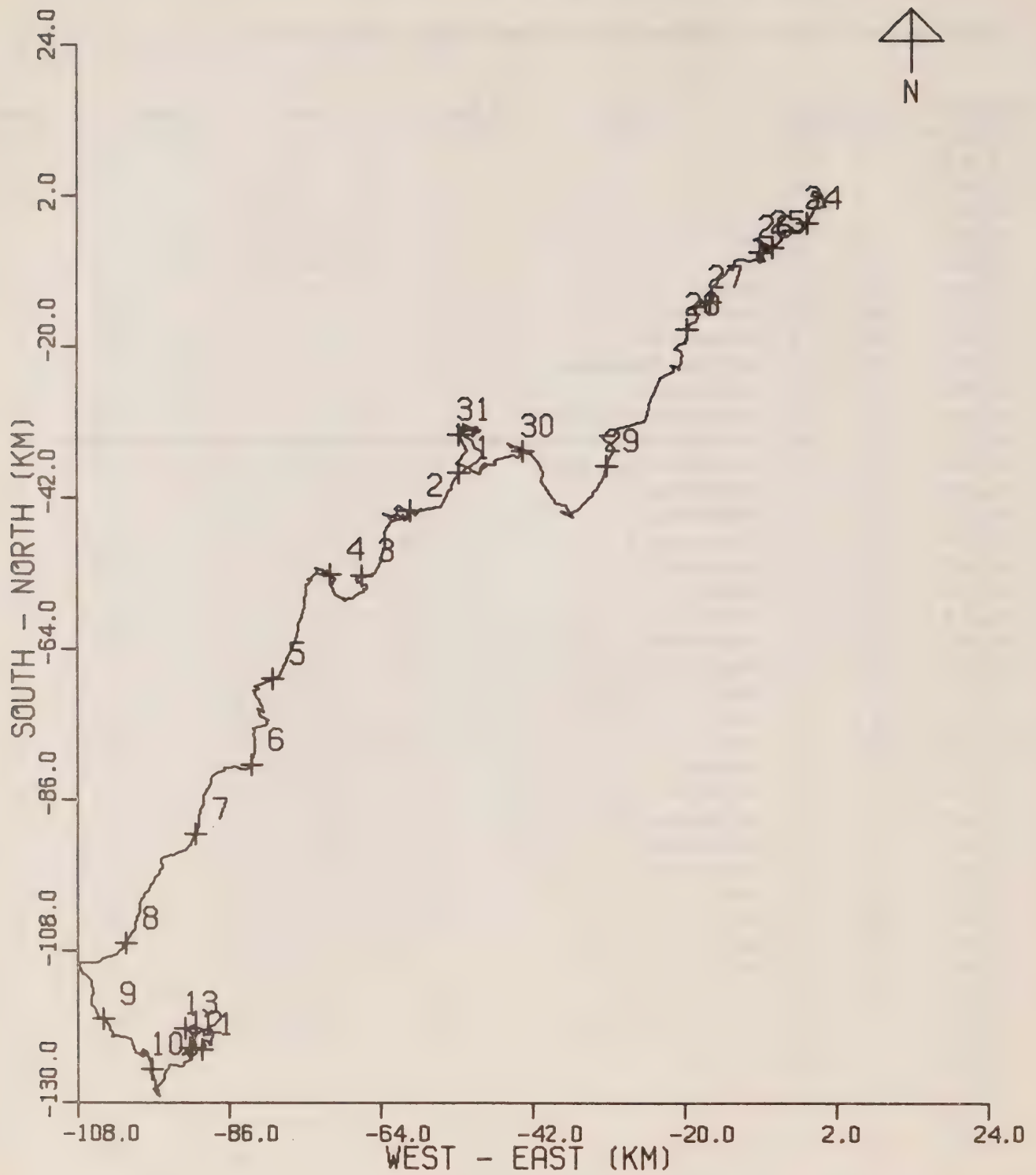
## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M START DATE 03/01/74

MEDIAN (DEG.C)	FREQNCY NO.	PCT	120	240	360	480	600
5.34	0	0	.	.	.	.	.
5.42	1	0					
5.50	12	0	*				
5.58	8	0	*				
5.66	24	1	**				
5.74	55	2	*****				
5.82	82	3	*****				
5.90	96	3	*****				
5.98	161	6	*****				
6.06	98	3	*****				
6.14	197	7	*****				
6.22	730	26	*****				
6.30	177	6	*****				
6.38	82	3	*****				
6.46	78	3	*****				
6.54	103	4	*****				
6.62	66	2	*****				
6.70	75	3	*****				
6.78	52	2	****				
6.86	82	3	*****				
6.94	33	1	***				
7.02	38	1	***				
7.10	33	1	***				
7.18	36	1	***				
7.26	62	2	*****				
7.34	72	3	*****				
7.42	119	4	*****				
7.50	92	3	*****				
7.58	78	3	*****				
7.66	35	1	***				
7.74	28	1	**				
7.82	18	1	**				
7.90	33	1	***				
7.98	2	0					
8.06	0	0					
8.14	0	0					
8.22	0	0					
8.30	0	0					
8.38	0	0					
8.46	0	0					

NO. OF SAMPLES OVER 8.50 = 0  
 NO. OF SAMPLES UNDER 5.30 = 0  
 TOTAL NO. OF OBSERVATIONS = 2858  
 SAMPLE INTERVAL = 10 MINUTES





STN. NO. HS-5N

DEPTH 10 M.

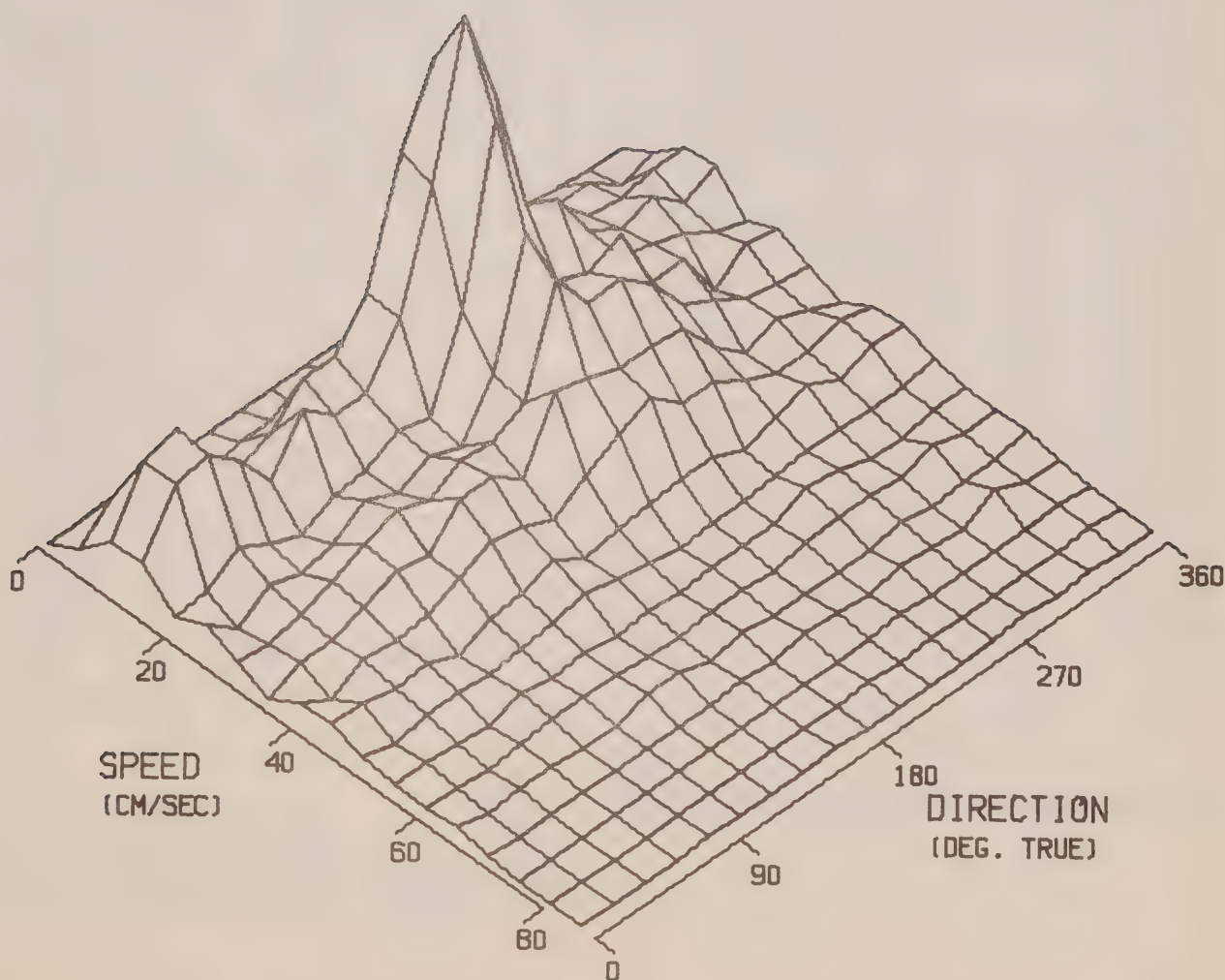
STARTING DATE: 23/ 1/74    ENDING DATE: 13/ 2/74

FREQUENCY DISTRIBUTION OF  
CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 23/ 1/74

NO. OF SAMPLES = 3000



STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 23/ 1/74  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	003	024	010	007	003	007	002	001	003				60
15- 29	013	047	011	002	003	007	001	002					86
30- 44	012	038	014	010	006	006	003				001		90
45- 59	006	042	012	005	009	008	001	001	001		001		86
60- 74	003	013	007	013	009		004	001					50
75- 89		013	010	012	013	002	004	002		001			57
90-104	005	019	009	026	009	007	004						79
105-119	004	019	017	016	014	010	002	005	001				88
120-134	001	028	013	014	025	010	004	001					96
135-149	001	030	014	021	021	015	004	002	002				110
150-164	006	043	006	013	017	005	002						92
165-179	005	059	031	016	018	009	003	001	001		001		144
180-194	008	106	070	048	031	008	001	001	002				275
195-209	029	109	111	068	035	013		001	002	001			369
210-224	013	081	059	061	033	014		001					262
225-239	021	045	040	036	027	009	002	001	001		001		183
240-254	010	049	031	043	032	017		003		002			187
255-269	010	036	035	040	021	009	003	005	002				161
270-284	005	021	028	025	016	007	005	004	001		001		113
285-299	010	019	023	028	008	004	002	001	001				96
300-314	010	015	020	015	007	014	003	003	003				90
315-329	007	016	013	010	007	005	002	004	002	001	001		68
330-344	002	007	011	010	010	010	001	002		002			55
345-359	005	015	008	009	004	007	006	002	002		001		59
	189		603		378		59		24		6		2956
		894		548		203		44		6		2	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 44

## HISTOGRAM OF SPEED

HOWE SOUND HS=5N DEPTH 10M START DATE 23/01/74

MEDIAN (MM/S)	FREQNCY NO.	PCT		60	120	180	240	300
11	4	0	*	.	.	.	.	.
33	22	1	*****					
55	71	2	*****					
77	169	6	*****					
99	262	9	*****					
121	249	8	*****					
143	254	8	*****					
165	243	8	*****					
187	155	5	*****					
209	156	5	*****					
231	123	4	*****					
253	139	5	*****					
275	171	6	*****					
297	142	5	*****					
319	127	4	*****					
341	146	5	*****					
363	87	3	*****					
385	92	3	*****					
407	74	2	*****					
429	52	2	*****					
451	48	2	*****					
473	32	1	*****					
495	17	1	***					
517	22	1	****					
539	11	0	**					
561	14	0	**					
583	12	0	**					
605	16	1	***					
627	8	0	*					
649	6	0	*					
671	6	0	*					
693	9	0	**					
715	5	0	*					
737	2	0						
759	0	0						
781	1	0						
803	1	0						
825	3	0	*					
847	1	0						
869	2	0						

NO. OF SAMPLES OVER 880 = 46  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M START DATE 23/01/74

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	50	100	150	200	250
5	49	2	*****				
15	40	1	*****				
25	63	2	*****				
35	67	2	*****				
45	60	2	*****				
55	50	2	*****				
65	39	1	*****				
75	36	1	*****				
85	36	1	*****				
95	49	2	*****				
105	64	2	*****				
115	62	2	*****				
125	65	2	*****				
135	72	2	*****				
145	66	2	*****				
155	64	2	*****				
165	79	3	*****				
175	111	4	*****				
185	170	6	*****				
195	248	8	*****				
205	229	8	*****				
215	184	6	*****				
225	142	5	*****				
235	122	4	*****				
245	125	4	*****				
255	107	4	*****				
265	117	4	*****				
275	82	3	*****				
285	72	2	*****				
295	58	2	*****				
305	59	2	*****				
315	58	2	*****				
325	44	1	*****				
335	38	1	*****				
345	44	1	*****				
355	29	1	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M START DATE 23/01/74

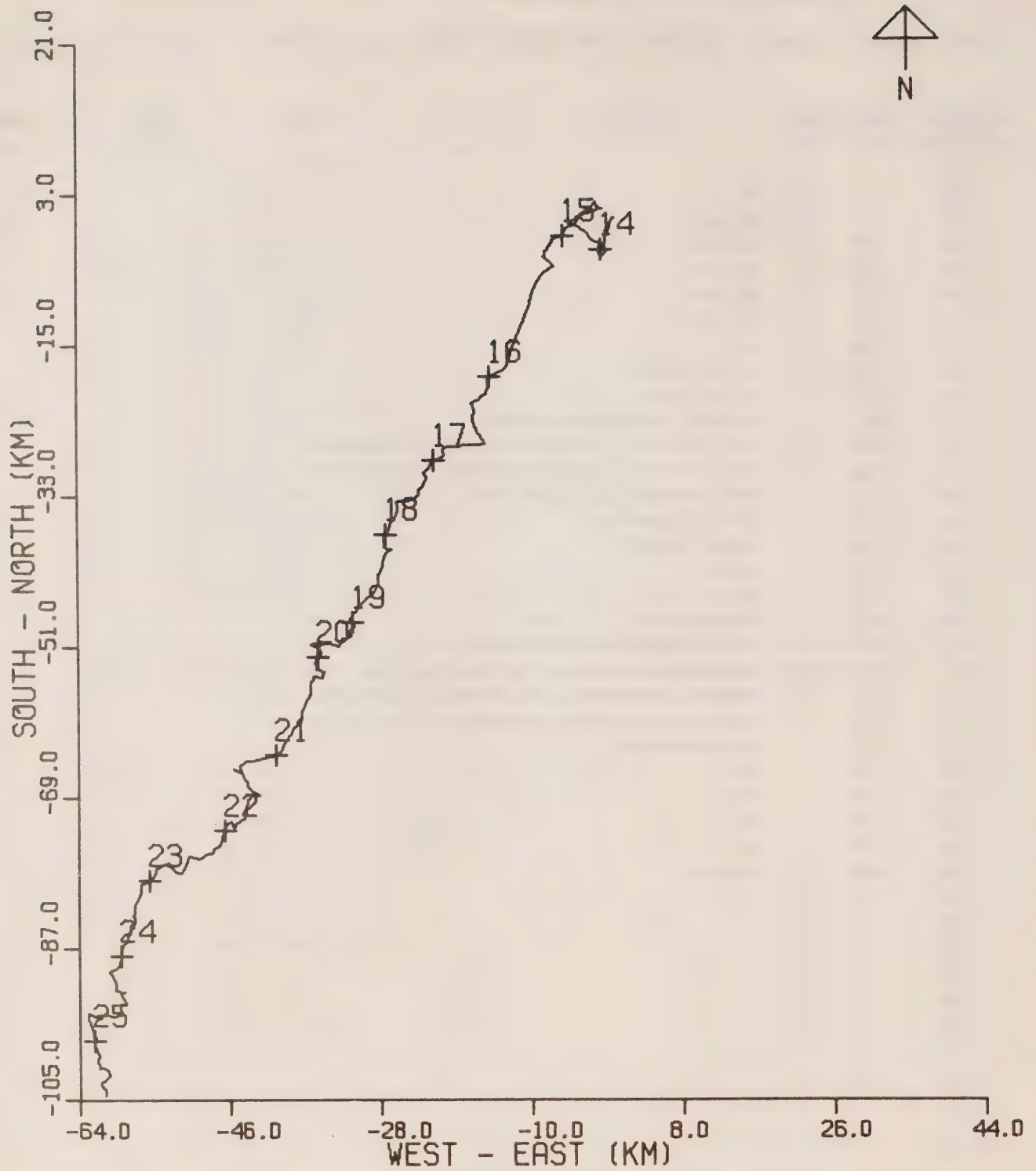
MEDIAN (DEG.C)	FREQNCY NO.	PCT	100	200	300	400	500
5.34	0	0	.	.	.	.	.
5.42	11	0	*				
5.50	50	2	*****				
5.58	59	2	*****				
5.66	53	2	*****				
5.74	51	2	*****				
5.82	46	2	*****				
5.90	34	1	***				
5.98	86	3	*****				
6.06	83	3	*****				
6.14	181	6	*****				
6.22	298	10	*****				
6.30	256	9	*****				
6.38	186	6	*****				
6.46	105	4	*****				
6.54	86	3	*****				
6.62	35	1	****				
6.70	65	2	*****				
6.78	82	3	*****				
6.86	194	6	*****				
6.94	259	9	*****				
7.02	303	10	*****				
7.10	212	7	*****				
7.18	101	3	*****				
7.26	17	1	**				
7.34	38	1	****				
7.42	18	1	**				
7.50	19	1	**				
7.58	48	2	*****				
7.66	15	1	**				
7.74	1	0					
7.82	1	0					
7.90	5	0	*				
7.98	0	0					
8.06	0	0					
8.14	0	0					
8.22	0	0					
8.30	0	0					
8.38	1	0					
8.46	0	0					

NO. OF SAMPLES OVER 8.50 = 0

NO. OF SAMPLES UNDER 5.30 = 1

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5N

DEPTH 10 M.

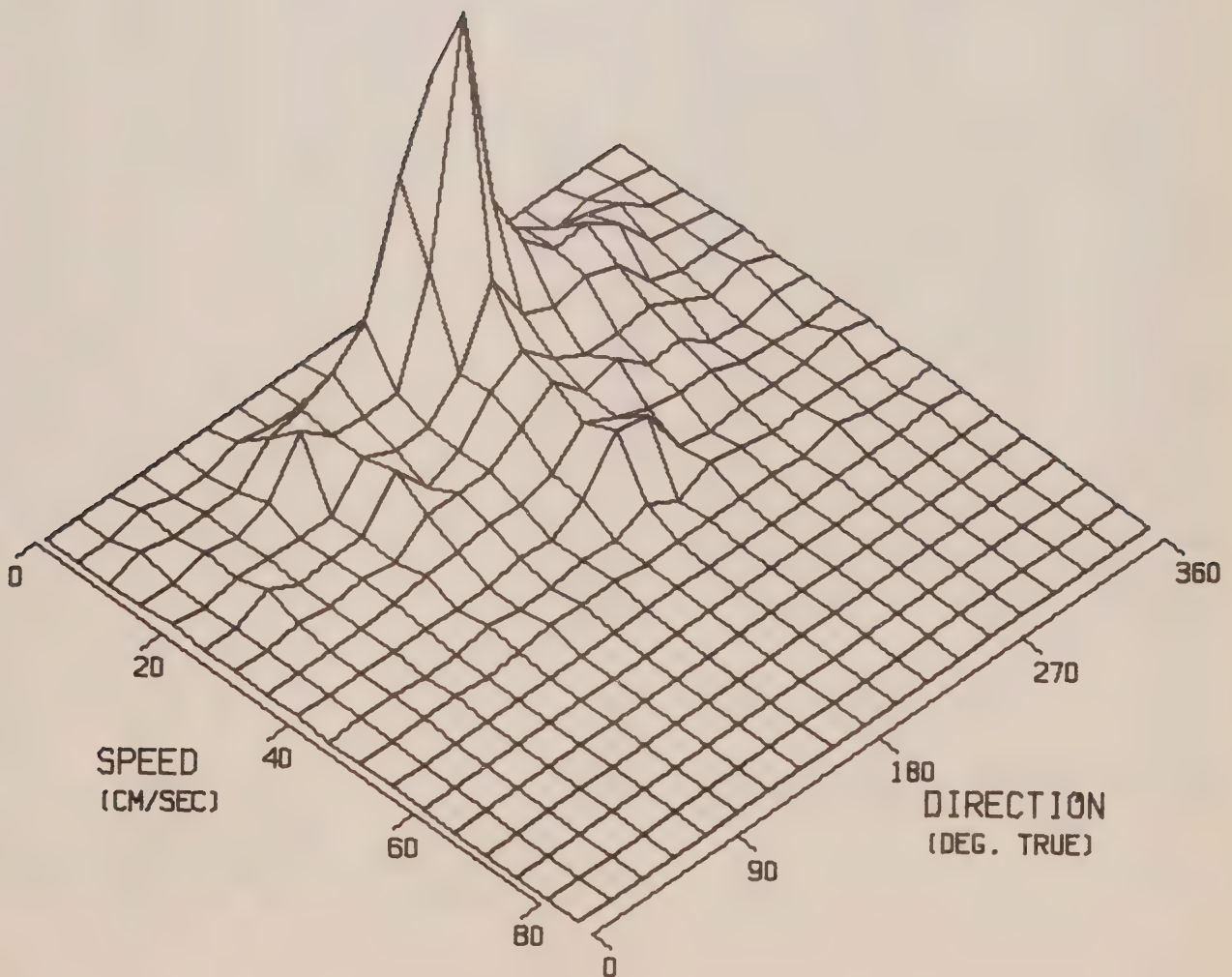
STARTING DATE: 13/ 2/74    ENDING DATE: 25/ 2/74

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-5N      DEPTH 10 M.

STARTING DATE: 13/ 2/74

NO. OF SAMPLES = 1784





STN. NO. HS-5N DEPTH 10 M.

STARTING DATE: 13/ 2/74

SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14		001	002	003	002	001	001						10
15- 29		004		002	001	001	001						9
30- 44	004	002	003	008	001	001							19
45- 59		002	003		002		001						8
60- 74		003	003	003	001	002	001						13
75- 89		005	003	002	002								12
90-104	001	018	005	003	003		001						31
105-119	003	025	010	012	003	002	001						56
120-134	001	018	015	015	006		002						57
135-149	001	027	009	012	007	001	002						59
150-164	004	027	008	009	006	001	003						58
165-179	009	052	024	019	008	002	002						116
180-194	020	101	030	032	022	005	001						211
195-209	026	176	068	034	023	018							345
210-224	020	105	042	026	028	005							226
225-239	007	073	018	017	016	004	001						136
240-254	002	029	027	018	005	005	001						87
255-269	004	037	024	016	007	003	002						93
270-284	002	027	028	013	009	001	001						81
285-299	003	031	016	004	003	003	003						63
300-314	002	018	010	003	002	001	002						38
315-329	003	009	001	001	001	005	001						21
330-344	001	005	006	007		004	001						24
345-359	001		001	001	001	002	002						8
	114		356		159		30		0		0		1781
		795		260		67		0		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 3

## HISTOGRAM OF SPEED

HOWE SOUND HS=5N DEPTH 10M START DATE 13/02/74

MEDIAN (MM/S)	FREQUENCY NO. PCT	50	100	150	200	250
7	0 0	.	.	.	.	.
21	2 0					
35	3 0	*				
49	19 1	*****				
63	36 2	*****				
77	87 5	*****				
91	134 8	*****				
105	135 8	*****				
119	178 10	*****				
133	127 7	*****				
147	158 9	*****				
161	66 4	*****				
175	81 5	*****				
189	82 5	*****				
203	60 3	*****				
217	56 3	*****				
231	41 2	*****				
245	34 2	*****				
259	61 3	*****				
273	47 3	*****				
287	51 3	*****				
301	33 2	*****				
315	47 3	*****				
329	26 1	*****				
343	31 2	*****				
357	25 1	*****				
371	25 1	*****				
385	36 2	*****				
399	20 1	****				
413	14 1	***				
427	16 1	***				
441	8 0	**				
455	6 0	*				
469	4 0	*				
483	8 0	**				
497	5 0	*				
511	9 1	**				
525	3 0	*				
539	4 0	*				
553	3 0	*				

NO. OF SAMPLES OVER 560 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1784  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5N DEPTH 10M START DATE 13/02/74

MEDIAN (DEG.T)	FREQNCY NO.	PCT	50	100	150	200	250
5	8	0	..	.	.	.	.
15	4	0	*				
25	7	0	*				
35	10	1	**				
45	15	1	***				
55	2	0					
65	8	0	**				
75	8	0	**				
85	9	1	**				
95	16	1	***				
105	36	2	*****				
115	39	2	*****				
125	44	2	*****				
135	31	2	*****				
145	39	2	*****				
155	47	3	*****				
165	43	2	*****				
175	97	5	*****				
185	129	7	*****				
195	191	11	*****				
205	239	13	*****				
215	158	9	*****				
225	105	6	*****				
235	90	5	*****				
245	62	3	*****				
255	56	3	*****				
265	61	3	*****				
275	63	4	*****				
285	42	2	*****				
295	36	2	*****				
305	26	1	*****				
315	22	1	****				
325	11	1	**				
335	17	1	***				
345	10	1	**				
355	3	0	*				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1784  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-5N DEPTH 10M START DATE 13/02/74

MEDIAN (DEG.C)	FREQNCY NO.	PCT	60	120	180	240	300
5.62	0	0	.	.	.	.	.
5.66	12	1	**				
5.70	29	2	*****				
5.74	22	1	*****				
5.78	44	2	*****				
5.82	23	1	****				
5.86	5	0	*				
5.90	1	0					
5.94	3	0	*				
5.98	10	1	**				
6.02	8	0	*				
6.06	5	0	*				
6.10	3	0	*				
6.14	16	1	***				
6.18	17	1	***				
6.22	15	1	***				
6.26	7	0	*				
6.30	17	1	***				
6.34	34	2	*****				
6.38	44	2	*****				
6.42	56	3	*****				
6.46	22	1	****				
6.50	36	2	*****				
6.54	45	3	*****				
6.58	61	3	*****				
6.62	35	2	*****				
6.66	93	5	*****				
6.70	61	3	*****				
6.74	88	5	*****				
6.78	37	2	*****				
6.82	131	7	*****				
6.86	145	8	*****				
6.90	252	14	*****				
6.94	182	10	*****				
6.98	72	4	*****				
7.02	45	3	*****				
7.06	49	3	*****				
7.10	38	2	*****				
7.14	8	0	*				
7.18	12	1	**				

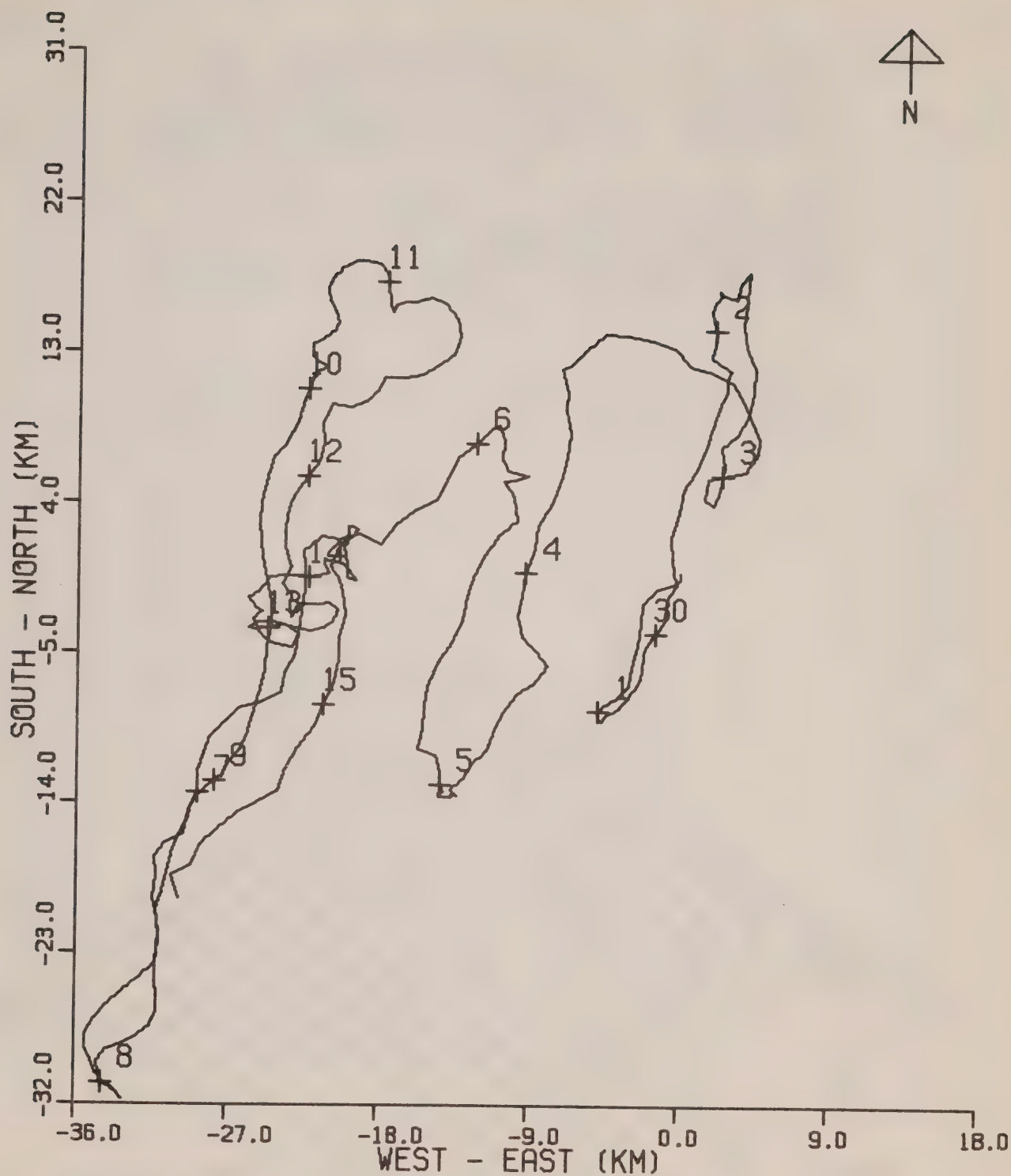
NO. OF SAMPLES OVER 7.20 = 1  
 NO. OF SAMPLES UNDER 5.60 = 0  
 TOTAL NO. OF OBSERVATIONS = 1784  
 SAMPLE INTERVAL = 10 MINUTES





DATA FOR 15-METRE DEPTH





STN. NO. HS-5S

DEPTH 15 M.

STARTING DATE: 29/11/72    ENDING DATE: 15/12/72

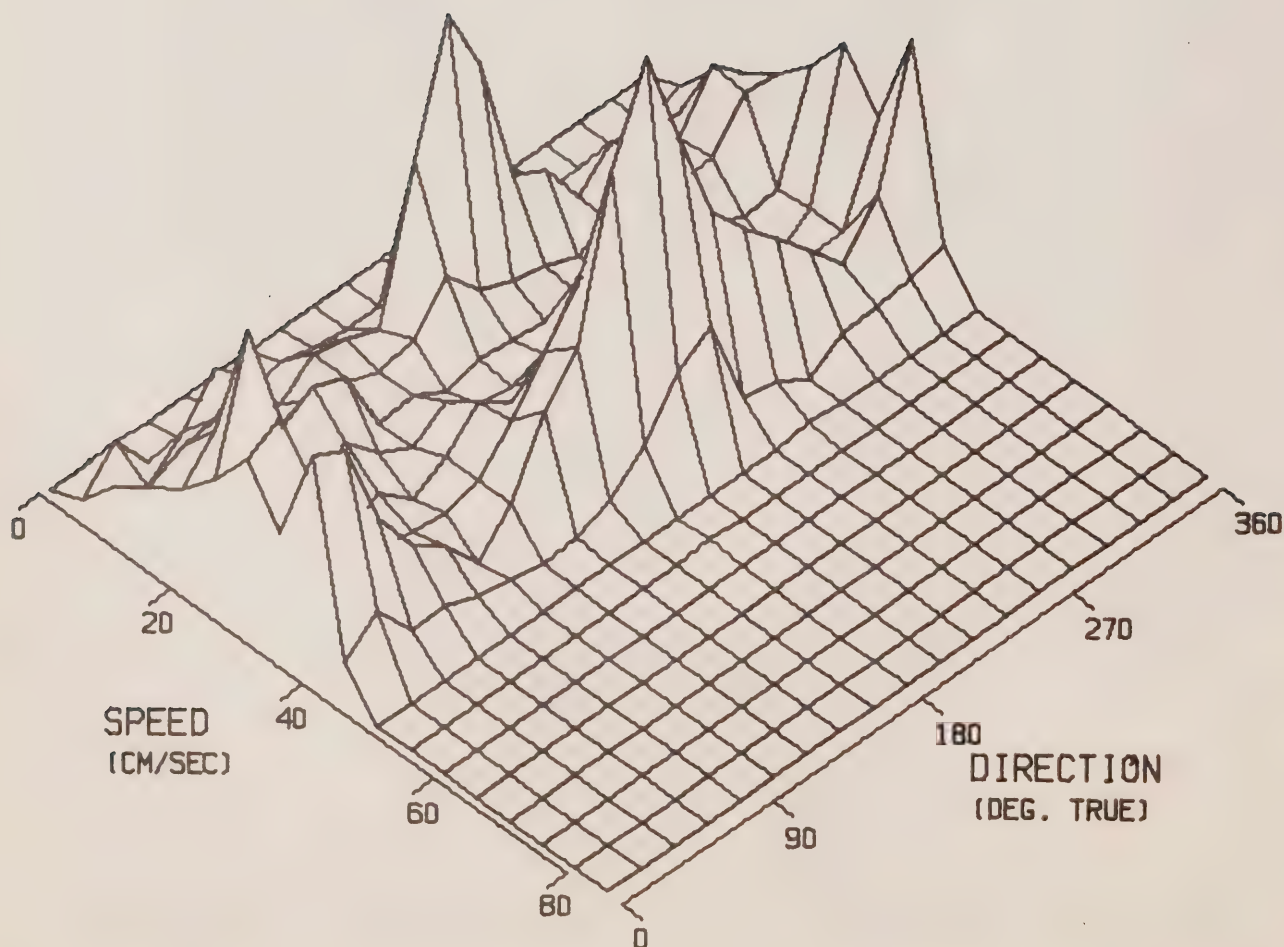


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 29/11/72

NO. OF SAMPLES = 2297



STN. NO. H8-58 DEPTH 15 M.

STARTING DATE: 29/11/72  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

DIR	000 TO 079	080 TO 159	160 TO 239	240 TO 319	320 TO 399	400 TO 479	480 TO 559	560 TO 639	640 TO 719	720 TO 799	800 TO 879	880 TO 959	
0- 14	002	014	027	050	049	025							167
15- 29	010	014	034	065	039	029							191
30- 44	002	017	023	033	012	022							109
45- 59	002	031	027	009	012	009							90
60- 74	003	014	028	014	008	008							75
75- 89	004	013	023	016	012	007							75
90-104	001	006	019	010	004	002							42
105-119	003	007	013	009	004	003							39
120-134	001	013	008	008	014	004							48
135-149	001	006	009	016	022	012							66
150-164		008	003	010	028	013							62
165-179	001	033	004	007	053	022	001						121
180-194	001	034	005	013	048	036							137
195-209	014	051	003	012	055	058							193
210-224	014	032	003	029	048	058							184
225-239	016	023	003	017	041	037							137
240-254	007	011	003	018	027	018	001						85
255-269	006	011	003	012	008	022							62
270-284	003	003	010	015	019	010							60
285-299		014	017	008	009	026							74
300-314		015	012	006	009	006							48
315-329		015	012	004	004	011							46
330-344		011	022	003	011	014							61
345-359	002	012	033	028	033	017							125
	93	344	569	2	0	0	0	0	0	0	0	0	2297
	408	412	469	0	0	0	0	0	0	0	0	0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-58 DEPTH 15M START DATE 29/11/72

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
6	0	0	.	.	.	.	.
18	0	0					
30	1	0					
42	3	0	*				
54	11	0	**				
66	43	2	*****				
78	66	3	*****				
90	85	4	*****				
102	81	4	*****				
114	51	2	*****				
126	52	2	*****				
138	46	2	*****				
150	45	2	*****				
162	56	2	*****				
174	50	2	*****				
186	60	3	*****				
198	61	3	*****				
210	50	2	*****				
222	51	2	*****				
234	52	2	*****				
246	31	1	*****				
258	72	3	*****				
270	73	3	*****				
282	59	3	*****				
294	56	2	*****				
306	62	3	*****				
318	61	3	*****				
330	59	3	*****				
342	65	3	*****				
354	91	4	*****				
366	98	4	*****				
378	94	4	*****				
390	141	6	*****				
402	96	4	*****				
414	174	8	*****				
426	93	4	*****				
438	66	3	*****				
450	28	1	*****				
462	11	0	**				
474	1	0					

NO. OF SAMPLES OVER 480 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2297  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-53 DEPTH 15M START DATE 29/11/72

MEDIAN (DEG.T)	FREQNCY NO.	PCT	30	60	90	120	150
5	119	5	*****	*****	*****	*****	*****
15	123	5	*****	*****	*****	*****	*****
25	133	6	*****	*****	*****	*****	*****
35	75	3	*****	*****	*****	*****	*****
45	52	2	*****	*****	*****	*****	*****
55	65	3	*****	*****	*****	*****	*****
65	49	2	*****	*****	*****	*****	*****
75	48	2	*****	*****	*****	*****	*****
85	43	2	*****	*****	*****	*****	*****
95	30	1	*****	*****	*****	*****	*****
105	26	1	*****	*****	*****	*****	*****
115	27	1	*****	*****	*****	*****	*****
125	29	1	*****	*****	*****	*****	*****
135	42	2	*****	*****	*****	*****	*****
145	44	2	*****	*****	*****	*****	*****
155	38	2	*****	*****	*****	*****	*****
165	53	2	*****	*****	*****	*****	*****
175	93	4	*****	*****	*****	*****	*****
185	92	4	*****	*****	*****	*****	*****
195	115	5	*****	*****	*****	*****	*****
205	129	6	*****	*****	*****	*****	*****
215	131	6	*****	*****	*****	*****	*****
225	103	4	*****	*****	*****	*****	*****
235	84	4	*****	*****	*****	*****	*****
245	48	2	*****	*****	*****	*****	*****
255	60	3	*****	*****	*****	*****	*****
265	38	2	*****	*****	*****	*****	*****
275	34	1	*****	*****	*****	*****	*****
285	49	2	*****	*****	*****	*****	*****
295	47	2	*****	*****	*****	*****	*****
305	35	2	*****	*****	*****	*****	*****
315	30	1	*****	*****	*****	*****	*****
325	31	1	*****	*****	*****	*****	*****
335	35	2	*****	*****	*****	*****	*****
345	64	3	*****	*****	*****	*****	*****
355	83	4	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2297  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-55 DEPTH 15M START DATE 29/11/72

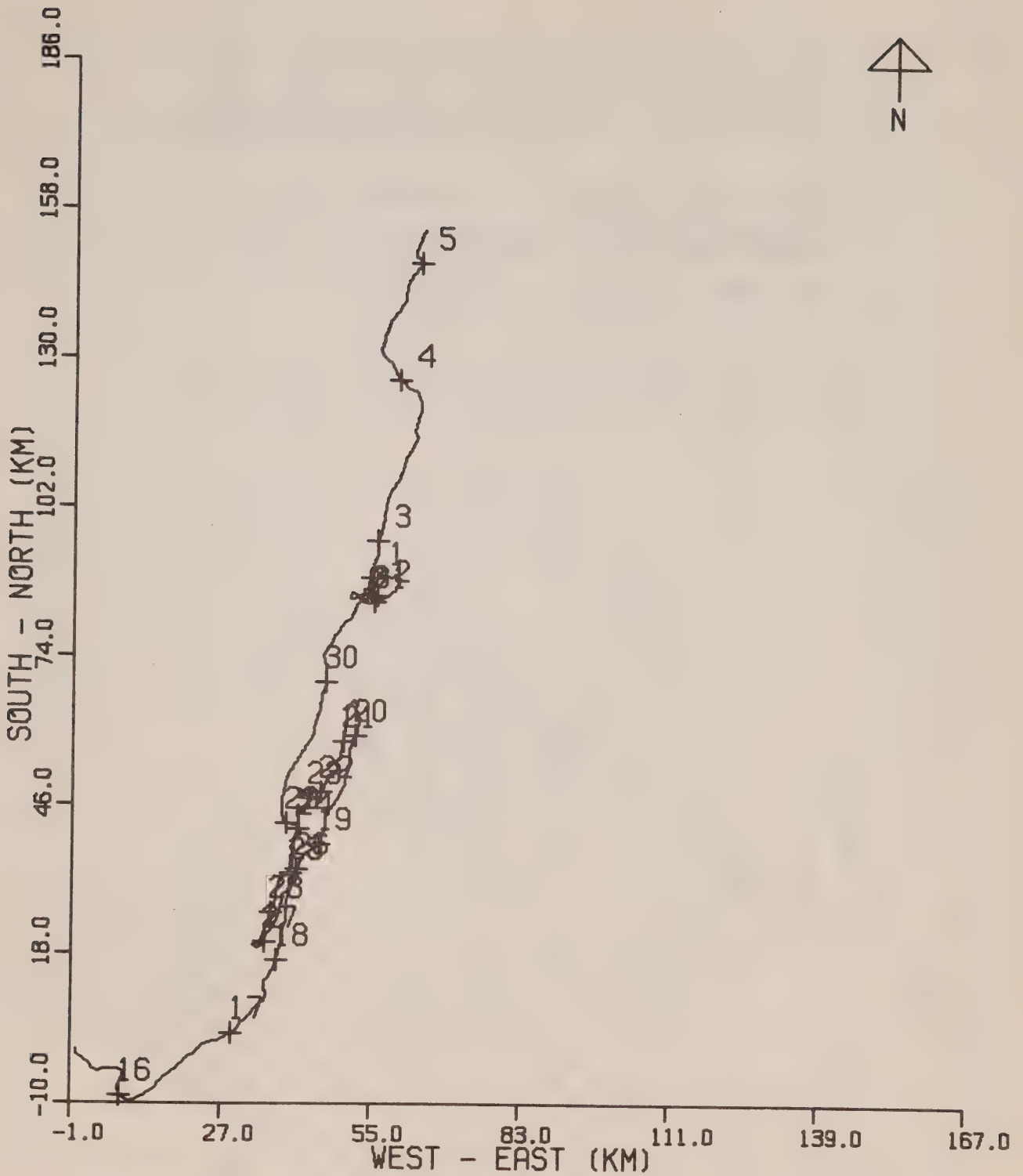
MEDIAN (DEG.C)	FREQUENCY NO.	PCT	60	120	180	240	300
6.04	0	0	.	.	.	.	.
6.12	0	0					
6.20	0	0					
6.28	1	0					
6.36	9	0	**				
6.44	3	0	*				
6.52	3	0	*				
6.60	7	0	*				
6.68	10	0	**				
6.76	76	3	*****				
6.84	96	4	*****				
6.92	203	9	*****				
7.00	92	4	*****				
7.08	72	3	*****				
7.16	31	1	*****				
7.24	64	3	*****				
7.32	31	1	*****				
7.40	31	1	*****				
7.48	46	2	*****				
7.56	53	2	*****				
7.64	107	5	*****				
7.72	88	4	*****				
7.80	83	4	*****				
7.88	122	5	*****				
7.96	108	5	*****				
8.04	143	6	*****				
8.12	104	5	*****				
8.20	109	5	*****				
8.28	33	1	*****				
8.36	28	1	*****				
8.44	98	4	*****				
8.52	204	9	*****				
8.60	106	5	*****				
8.68	109	5	*****				
8.76	25	1	****				
8.84	2	0					
8.92	0	0					
9.00	0	0					
9.08	0	0					
9.16	0	0					

NO. OF SAMPLES OVER 9.20 = 0

NO. OF SAMPLES UNDER 6.00 = 0

TOTAL NO. OF OBSERVATIONS = 2297

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 15 M.

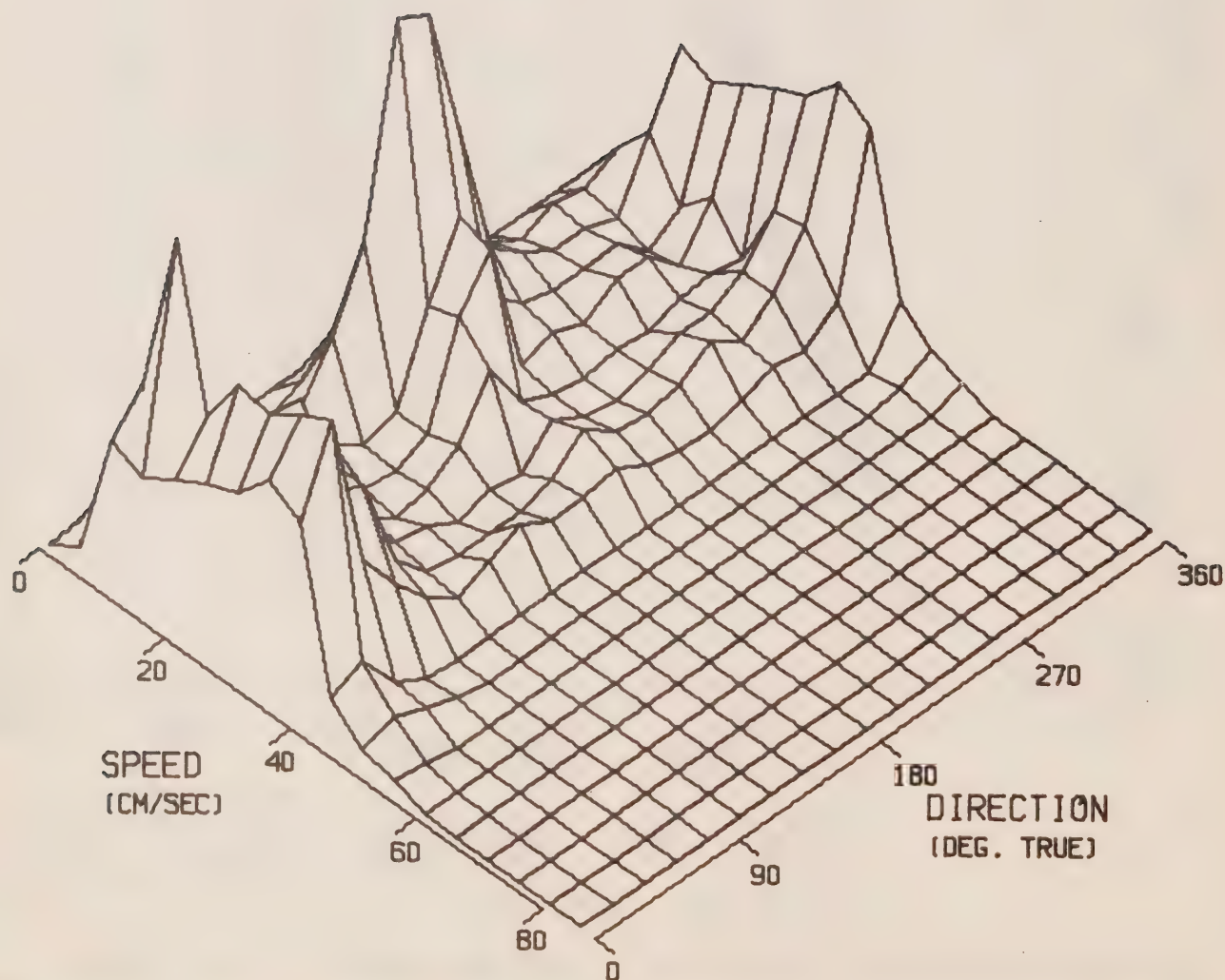
STARTING DATE: 15/12/72    ENDING DATE: 5/ 1/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 15/12/72

NO. OF SAMPLES = 3000



STN. NO. HS-58 DEPTH 15 M.

STARTING DATE: 15/12/72  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

DIR	000 TO 079	080 TO 159	160 TO 239	240 TO 319	320 TO 399	400 TO 479	480 TO 559	560 TO 639	640 TO 719	720 TO 799	800 TO 879	880 TO 959	
0- 14	009	074	048	091	113	031	006						372
15- 29	018	100	070	086	091	049	009						423
30- 44	011	042	044	070	057	017	004						245
45- 59	006	018	029	063	053	012	001						182
60- 74	010	027	024	045	033	004	001						144
75- 89	009	021	013	014	013	002							72
90-104	003	022	010	011	007	001							54
105-119	004	018	005	011	006	001							45
120-134	006	014	003	003	008	004							38
135-149	009	017	004	005	011	003							49
150-164	019	031	007	003	004	004							68
165-179	017	067	016	010	008	001							119
180-194	026	101	053	024	011	004							219
195-209	035	090	050	009	019	002							205
210-224	024	060	010	006	010	001							111
225-239	011	028	013	005	008	001							66
240-254	005	020	011	007	007	001							51
255-269	011	014	014	006	009	002							56
270-284	010	007	017	004	014	001							53
285-299	006	009	019	015	013	001							63
300-314	010	003	009	020	010	002							54
315-329	006	005	007	011	020	002							51
330-344	015	015	016	019	024	003							92
345-359	011	029	037	032	043	012	004						168
	291		529		592		25		0		0		3000
		832		570		161		0		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 15M START DATE 15/12/72

MEDIAN (MM/S)	FREQUENCY NO. PCT	50	100	150	200	250
7	0 0	.	.	.	.	.
21	1 0					
35	5 0	*				
49	43 1	*****				
63	119 4	*****				
77	193 6	*****				
91	214 7	*****				
105	138 5	*****				
119	155 5	*****				
133	104 3	*****				
147	128 4	*****				
161	76 3	*****				
175	86 3	*****				
189	105 4	*****				
203	88 3	*****				
217	124 4	*****				
231	73 2	*****				
245	86 3	*****				
259	101 3	*****				
273	78 3	*****				
287	111 4	*****				
301	95 3	*****				
315	134 4	*****				
329	100 3	*****				
343	79 3	*****				
357	138 5	*****				
371	86 3	*****				
385	131 4	*****				
399	77 3	*****				
413	51 2	*****				
427	23 1	*****				
441	12 0	**				
455	9 0	**				
469	8 0	**				
483	8 0	**				
497	7 0	*				
511	6 0	*				
525	4 0	*				
539	4 0	*				
553	0 0					

NO. OF SAMPLES OVER 560 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 15M START DATE 15/12/72

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	60	120	180	240	300
5	262	9	*****	*****	*****	*****	*****
15	287	10	*****	*****	*****	*****	*****
25	264	9	*****	*****	*****	*****	*****
35	177	6	*****	*****	*****	*****	*****
45	122	4	*****	*****	*****	*****	*****
55	122	4	*****	*****	*****	*****	*****
65	98	3	*****	*****	*****	*****	*****
75	69	2	*****	*****	*****	*****	*****
85	41	1	*****	*****	*****	*****	*****
95	35	1	*****	*****	*****	*****	*****
105	34	1	*****	*****	*****	*****	*****
115	28	1	*****	*****	*****	*****	*****
125	25	1	*****	*****	*****	*****	*****
135	32	1	*****	*****	*****	*****	*****
145	34	1	*****	*****	*****	*****	*****
155	41	1	*****	*****	*****	*****	*****
165	65	2	*****	*****	*****	*****	*****
175	89	3	*****	*****	*****	*****	*****
185	143	5	*****	*****	*****	*****	*****
195	147	5	*****	*****	*****	*****	*****
205	131	4	*****	*****	*****	*****	*****
215	68	2	*****	*****	*****	*****	*****
225	67	2	*****	*****	*****	*****	*****
235	37	1	*****	*****	*****	*****	*****
245	35	1	*****	*****	*****	*****	*****
255	33	1	*****	*****	*****	*****	*****
265	34	1	*****	*****	*****	*****	*****
275	34	1	*****	*****	*****	*****	*****
285	41	1	*****	*****	*****	*****	*****
295	43	1	*****	*****	*****	*****	*****
305	37	1	*****	*****	*****	*****	*****
315	33	1	*****	*****	*****	*****	*****
325	36	1	*****	*****	*****	*****	*****
335	66	2	*****	*****	*****	*****	*****
345	77	3	*****	*****	*****	*****	*****
355	113	4	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-58 DEPTH 15M START DATE 15/12/72

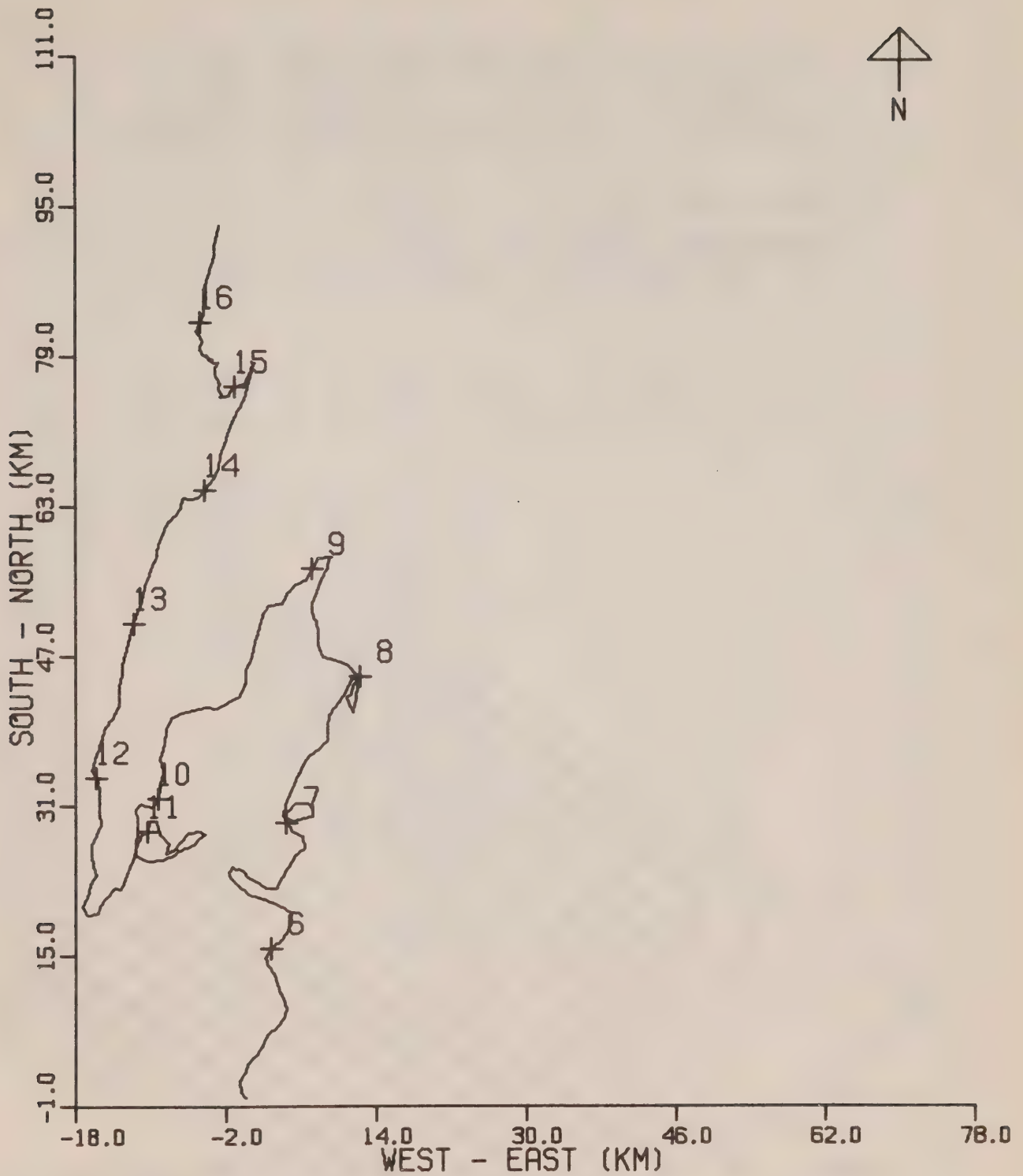
MEDIAN (DEG.C)	FREQNCY NO.	PCT	60	120	180	240	300
5.54	0	0	.	.	.	.	.
5.62	5	0	*				
5.70	17	1	***				
5.78	22	1	*****				
5.86	29	1	*****				
5.94	70	2	*****				
6.02	88	3	*****				
6.10	113	4	*****				
6.18	164	5	*****				
6.26	118	4	*****				
6.34	75	3	*****				
6.42	70	2	*****				
6.50	151	5	*****				
6.58	171	6	*****				
6.66	94	3	*****				
6.74	94	3	*****				
6.82	113	4	*****				
6.90	80	3	*****				
6.98	67	2	*****				
7.06	61	2	*****				
7.14	61	2	*****				
7.22	41	1	*****				
7.30	49	2	*****				
7.38	37	1	*****				
7.46	85	3	*****				
7.54	69	2	*****				
7.62	64	2	*****				
7.70	56	2	*****				
7.78	142	5	*****				
7.86	190	6	*****				
7.94	138	5	*****				
8.02	94	3	*****				
8.10	122	4	*****				
8.18	120	4	*****				
8.26	58	2	*****				
8.34	59	2	*****				
8.42	13	0	**				
8.50	0	0					
8.58	0	0					
8.66	0	0					

NO. OF SAMPLES OVER 8.70 = 0

NO. OF SAMPLES UNDER 5.50 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 15 M.

STARTING DATE: 5/ 1/73    ENDING DATE: 16/ 1/73

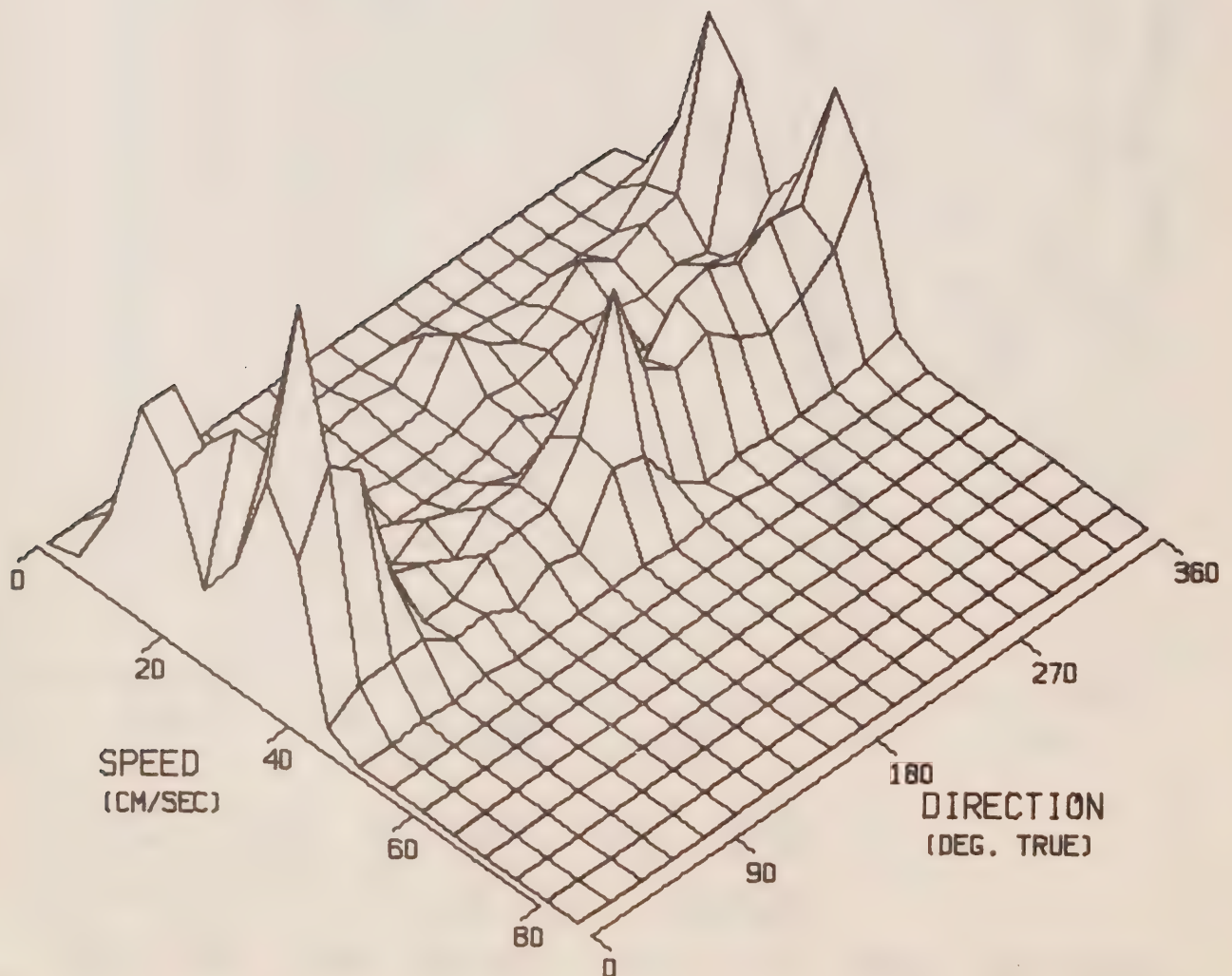


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 5/ 1/73

NO. OF SAMPLES = 1617



STN. NO. HS-55 DEPTH 15 M.

STARTING DATE: 5/ 1/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	003	045	064	036	060	024							232
15- 29	007	033	046	061	091	025							263
30- 44	001	020	021	024	056	025							147
45- 59		005	001	009	040	014							69
60- 74		002		003	015	010							30
75- 89		002	003	007	011	004	001						28
90-104		006	005	001	006	005							23
105-119		005	002	003	006	005							21
120-134			001	002	008	004							15
135-149		001		001	011	009							22
150-164	001			002	009	004							16
165-179		002	001	001	017	013							34
180-194		002	002	002	024	032							62
195-209		017	004	003	041	024							89
210-224		008	002	001	027	011	001						50
225-239		002	003	002	028	009							44
240-254			005		029	004							38
255-269		002	005	003	030	006							46
270-284		005	010	002	028	006							51
285-299		002	002	001	032	005							42
300-314		005	003	008	030	006							52
315-329		005	005	019	025	003							57
330-344	001	013	003	018	027	010							72
345-359	001	021	016	013	048	015							114
	14		204		699		2		0		0		1617
		203		222		273		0		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-58 DEPTH 15M START DATE 05/01/73

MEDIAN (MM/S)	FREQUENCY NO, PCT	40	80	120	160	200
7	0 0					
21	0 0					
35	1 0					
49	6 0	**				
63	2 0	*				
77	9 1	**				
91	25 2	*****				
105	30 2	*****				
119	33 2	*****				
133	33 2	*****				
147	61 4	*****				
161	52 3	*****				
175	45 3	*****				
189	57 4	*****				
203	23 1	*****				
217	22 1	*****				
231	22 1	*****				
245	24 1	*****				
259	29 2	*****				
273	42 3	*****				
287	41 3	*****				
301	34 2	*****				
315	75 5	*****				
329	75 5	*****				
343	93 6	*****				
357	180 11	*****				
371	145 9	*****				
385	147 9	*****				
399	97 6	*****				
413	77 5	*****				
427	67 4	*****				
441	24 1	*****				
455	31 2	*****				
469	9 1	**				
483	6 0	**				
497	0 0					
511	0 0					
525	0 0					
539	0 0					
553	0 0					

NO. OF SAMPLES OVER 560 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1617  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 15M START DATE 05/01/73

MEDIAN (DEG.T)	FREQUNCY NO.	PCT	50	100	150	200	250
5	146	9	*****				
15	205	13	*****				
25	155	10	*****				
35	104	6	*****				
45	62	4	*****				
55	42	3	*****				
65	21	1	****				
75	19	1	****				
85	17	1	***				
95	14	1	***				
105	15	1	***				
115	14	1	***				
125	8	0	**				
135	12	1	**				
145	16	1	***				
155	9	1	**				
165	20	1	****				
175	24	1	*****				
185	35	2	*****				
195	56	3	*****				
205	63	4	*****				
215	31	2	*****				
225	30	2	*****				
235	31	2	*****				
245	18	1	****				
255	36	2	*****				
265	29	2	*****				
275	33	2	*****				
285	31	2	*****				
295	29	2	*****				
305	24	1	*****				
315	48	3	*****				
325	39	2	*****				
335	47	3	*****				
345	45	3	*****				
355	89	6	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0

NO. OF SAMPLES UNDER 0 = 0

TOTAL NO. OF OBSERVATIONS = 1617

SAMPLE INTERVAL = 10 MINUTES

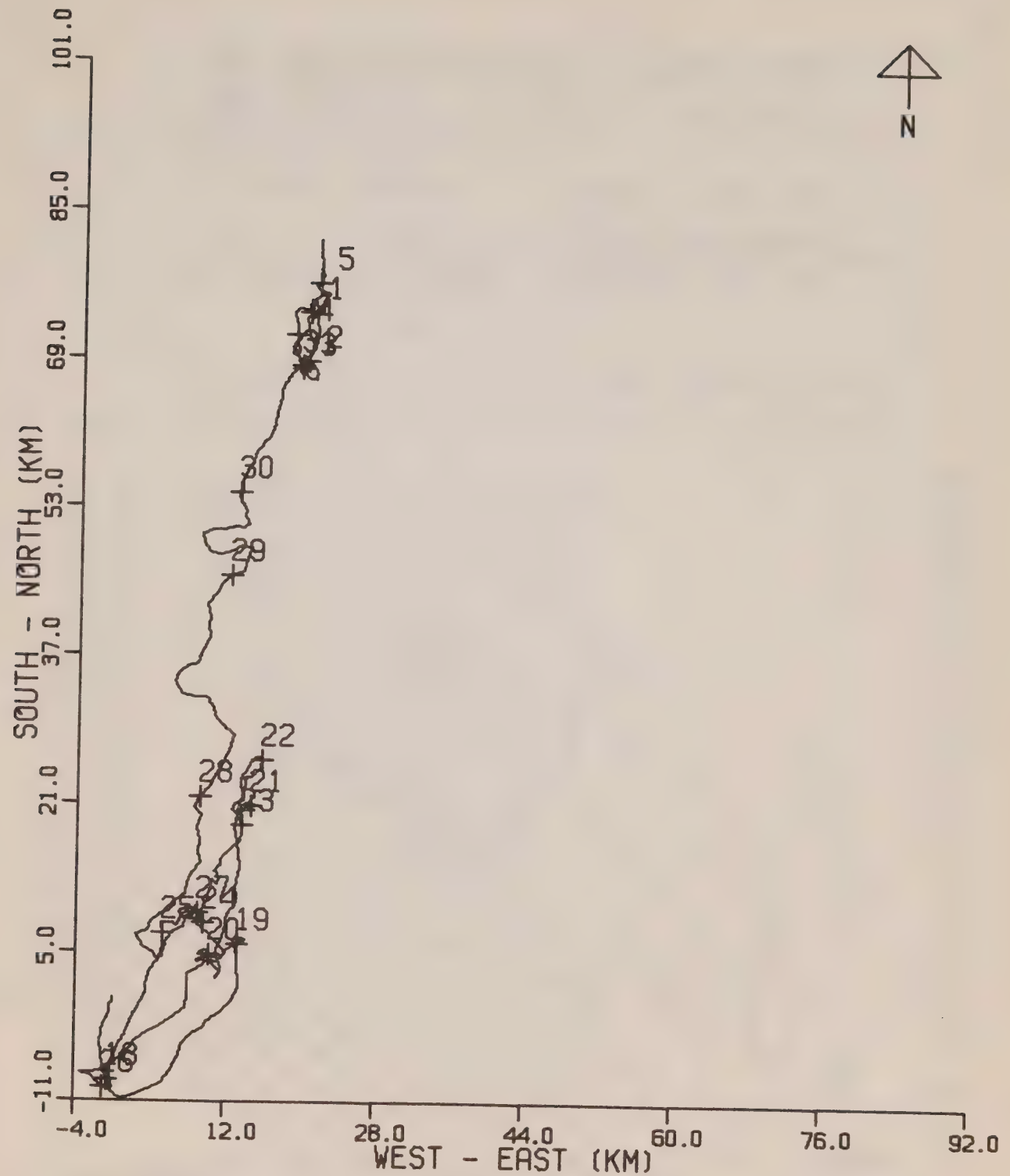


## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-58 DEPTH 15M START DATE 05/01/73

MEDIAN (DEG.C)	FREQNCY NO.	PCT	30	60	90	120	150
5.33	0	0	.	.	.	.	.
5.39	0	0					
5.45	26	2	*****				
5.51	26	2	*****				
5.57	15	1	*****				
5.63	20	1	*****				
5.69	11	1	****				
5.75	4	0	*				
5.81	3	0	*				
5.87	0	0					
5.93	2	0	*				
5.99	1	0					
6.05	2	0	*				
6.11	3	0	*				
6.17	45	3	*****				
6.23	73	5	*****				
6.29	74	5	*****				
6.35	47	3	*****				
6.41	46	3	*****				
6.47	73	5	*****				
6.53	4	0	*				
6.59	23	1	*****				
6.65	13	1	****				
6.71	28	2	*****				
6.77	27	2	*****				
6.83	73	5	*****				
6.89	107	7	*****				
6.95	85	5	*****				
7.01	127	8	*****				
7.07	125	8	*****				
7.13	123	8	*****				
7.19	119	7	*****				
7.25	125	8	*****				
7.31	48	3	*****				
7.37	67	4	*****				
7.43	22	1	*****				
7.49	22	1	*****				
7.55	8	0	***				
7.61	0	0					
7.67	0	0					

NO. OF SAMPLES OVER 7.70 = 0  
 NO. OF SAMPLES UNDER 5.30 = 0  
 TOTAL NO. OF OBSERVATIONS = 1617  
 SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 15 M.

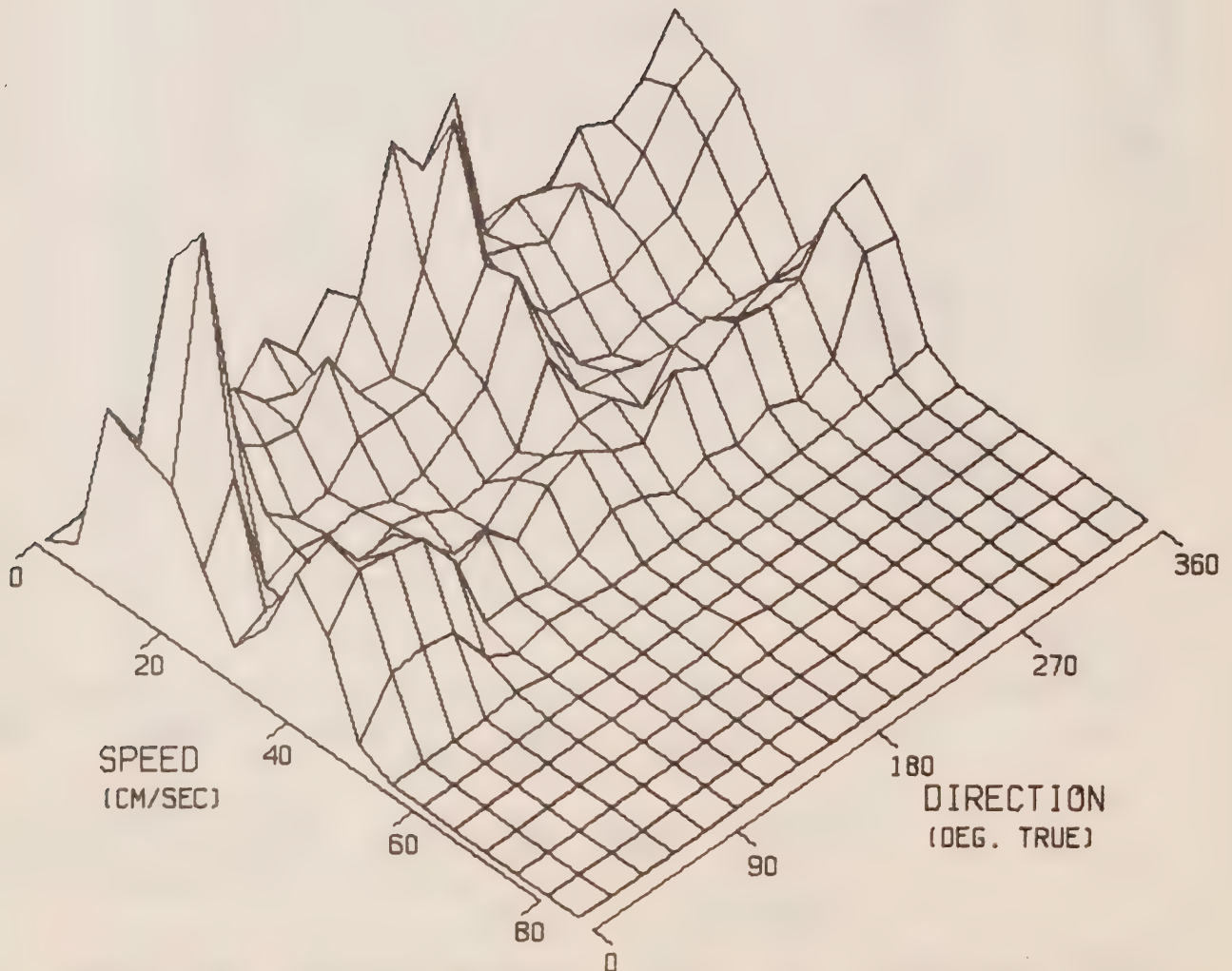
STARTING DATE: 17/ 1/73    ENDING DATE: 5/ 2/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 17/ 1/73

NO. OF SAMPLES = 2693



STN. NO. HS-58 DEPTH 15 M.

STARTING DATE: 17/ 1/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO
DIR	079	159	239	319	399	479	559	639	719	799	879	959
0- 14	005	059	061	027	024	028	004					208
15- 29	006	049	081	024	027	044	010					241
30- 44	005	072	050	002	019	039	010					197
45- 59	008	029	016	009	019	044	010					135
60- 74	008	036	010	005	012	035	009					115
75- 89	009	023	011	004	011	015	001					74
90-104	008	017	007	011	012	007	001					63
105-119	011	023	020	005	009	004						72
120-134	015	020	012	007	003	007	003					67
135-149	008	013	015	004	003	003						46
150-164	015	018	013	005	007	008						66
165-179	016	049	011	010	014	006		001				107
180-194	013	063	034	023	007	016			001			157
195-209	021	066	035	031	017	008						178
210-224	011	053	026	018	012	003						123
225-239	007	036	018	009	009	008						87
240-254	009	018	011	008	010	012						68
255-269	012	025	013	005	016	011						82
270-284	010	024	012	004	018	013						81
285-299	005	034	014	006	016	009	001					85
300-314	011	026	014	003	015	012						81
315-329	012	027	015	004	015	014	001					88
330-344	013	034	030	008	014	026	002					127
345-359	006	033	031	011	022	040	002					145
	244		560		331		54		1		0	2693
		847		243		412		1		0		0

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0



## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 15M. START DATE 17/01/73

MEDIAN (MM/S)	FREQUENCY NO. PCT .	50 .	100 .	150 .	200 .	250 .
7	0 0					
21	2 0					
35	18 1	****				
49	69 3	*****				
63	104 4	*****				
77	92 3	*****				
91	155 6	*****				
105	148 5	*****				
119	183 7	*****				
133	116 4	*****				
147	176 7	*****				
161	104 4	*****				
175	113 4	*****				
189	127 5	*****				
203	84 3	*****				
217	112 4	*****				
231	48 2	*****				
245	66 2	*****				
259	65 2	*****				
273	26 1	*****				
287	34 1	*****				
301	25 1	*****				
315	41 2	*****				
329	37 1	*****				
343	58 2	*****				
357	70 3	*****				
371	52 2	*****				
385	81 3	*****				
399	80 3	*****				
413	83 3	*****				
427	109 4	*****				
441	71 3	*****				
455	51 2	*****				
469	28 1	*****				
483	30 1	*****				
497	21 1	****				
511	10 0	**				
525	2 0					
539	0 0					
553	0 0					

NO. OF SAMPLES OVER 560 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2693  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 15M. START DATE 17/01/73

MEDIAN (DEG.T)	FREQ NO.	PCT	40	80	120	160	200
5	128	5	*****	*****	*****	*****	*****
15	184	7	*****	*****	*****	*****	*****
25	152	6	*****	*****	*****	*****	*****
35	131	5	*****	*****	*****	*****	*****
45	108	4	*****	*****	*****	*****	*****
55	90	3	*****	*****	*****	*****	*****
65	74	3	*****	*****	*****	*****	*****
75	63	2	*****	*****	*****	*****	*****
85	46	2	*****	*****	*****	*****	*****
95	36	1	*****	*****	*****	*****	*****
105	47	2	*****	*****	*****	*****	*****
115	54	2	*****	*****	*****	*****	*****
125	46	2	*****	*****	*****	*****	*****
135	26	1	*****	*****	*****	*****	*****
145	37	1	*****	*****	*****	*****	*****
155	45	2	*****	*****	*****	*****	*****
165	61	2	*****	*****	*****	*****	*****
175	72	3	*****	*****	*****	*****	*****
185	98	4	*****	*****	*****	*****	*****
195	127	5	*****	*****	*****	*****	*****
205	111	4	*****	*****	*****	*****	*****
215	90	3	*****	*****	*****	*****	*****
225	62	2	*****	*****	*****	*****	*****
235	51	2	*****	*****	*****	*****	*****
245	52	2	*****	*****	*****	*****	*****
255	46	2	*****	*****	*****	*****	*****
265	52	2	*****	*****	*****	*****	*****
275	51	2	*****	*****	*****	*****	*****
285	59	2	*****	*****	*****	*****	*****
295	57	2	*****	*****	*****	*****	*****
305	44	2	*****	*****	*****	*****	*****
315	66	2	*****	*****	*****	*****	*****
325	62	2	*****	*****	*****	*****	*****
335	84	3	*****	*****	*****	*****	*****
345	101	4	*****	*****	*****	*****	*****
355	80	3	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2693  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-58 DEPTH 15M, START DATE 17/01/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT .	60	120	180	240	300
4.94	0	0	.	.	.	.	.
5.02	0	0					
5.10	0	0					
5.18	0	0					
5.26	0	0					
5.34	0	0					
5.42	0	0					
5.50	1	0					
5.58	3	0					
5.66	11	0	**				
5.74	51	2	*****				
5.82	74	3	*****				
5.90	56	2	*****				
5.98	52	2	*****				
6.06	55	2	*****				
6.14	87	3	*****				
6.22	66	2	*****				
6.30	69	3	*****				
6.38	138	5	*****				
6.46	119	4	*****				
6.54	79	3	*****				
6.62	105	4	*****				
6.70	112	4	*****				
6.78	129	5	*****				
6.86	170	6	*****				
6.94	185	7	*****				
7.02	223	8	*****				
7.10	77	3	*****				
7.18	92	3	*****				
7.26	36	1	*****				
7.34	46	2	*****				
7.42	43	2	*****				
7.50	29	1	*****				
7.58	34	1	*****				
7.66	41	2	*****				
7.74	57	2	*****				
7.82	52	2	*****				
7.90	278	10	*****				
7.98	97	4	*****				
8.06	26	1	****				

NO. OF SAMPLES OVER 8.10 = 0

NO. OF SAMPLES UNDER 4.90 = 0

TOTAL NO. OF OBSERVATIONS = 2693

SAMPLE INTERVAL = 10 MINUTES

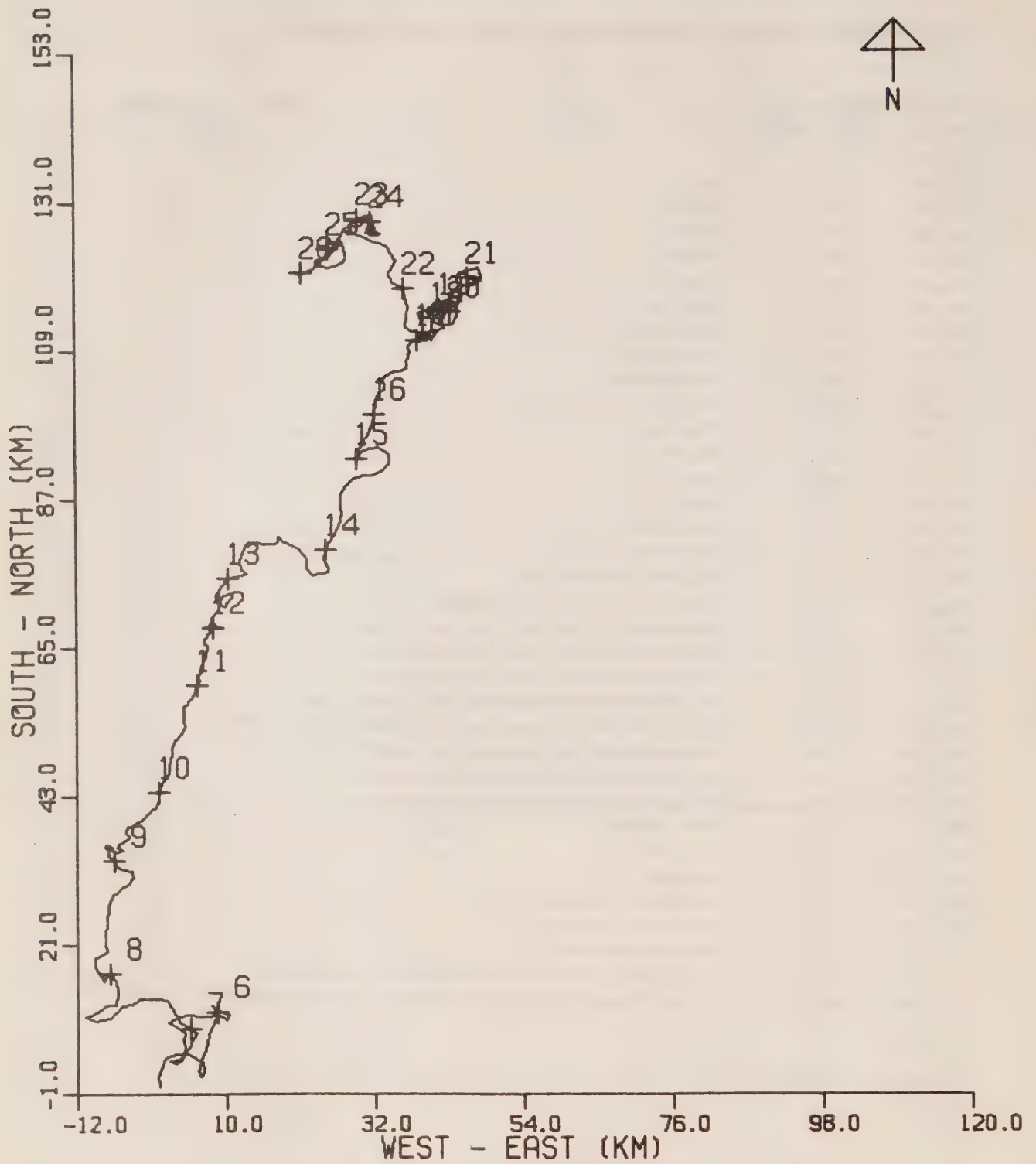
## HISTOGRAM OF SALINITY

HOWE SOUND HS-5S DEPTH 15M. START DATE 17/01/73

MEDIAN (PPT)	FREQUENCY NO.	PCT	60	120	180	240	300
26.06	1	0	.	.	.	.	.
26.18	14	1	**				
26.30	30	1	*****				
26.42	29	1	*****				
26.54	25	1	*****				
26.66	28	1	*****				
26.78	28	1	*****				
26.90	38	1	*****				
27.02	51	2	*****				
27.14	45	2	*****				
27.26	32	1	*****				
27.38	39	1	*****				
27.50	36	1	*****				
27.62	20	1	***				
27.74	15	1	***				
27.86	36	1	*****				
27.98	64	2	*****				
28.10	86	3	*****				
28.22	113	4	*****				
28.34	85	3	*****				
28.46	117	4	*****				
28.58	146	5	*****				
28.70	180	7	*****				
28.82	208	8	*****				
28.94	174	6	*****				
29.06	116	4	*****				
29.18	155	6	*****				
29.30	40	1	*****				
29.42	38	1	*****				
29.54	30	1	*****				
29.66	65	2	*****				
29.78	92	3	*****				
29.90	63	2	*****				
30.02	173	6	*****				
30.14	265	10	*****				
30.26	16	1	***				
30.38	0	0					
30.50	0	0					
30.62	0	0					
30.74	0	0					

NO. OF SAMPLES OVER 30.80 = 0  
 NO. OF SAMPLES UNDER 26.00 = 0  
 TOTAL NO. OF OBSERVATIONS = 2693  
 SAMPLE INTERVAL = 10 MINUTES





STN. NO. HS-5S

DEPTH 15 M.

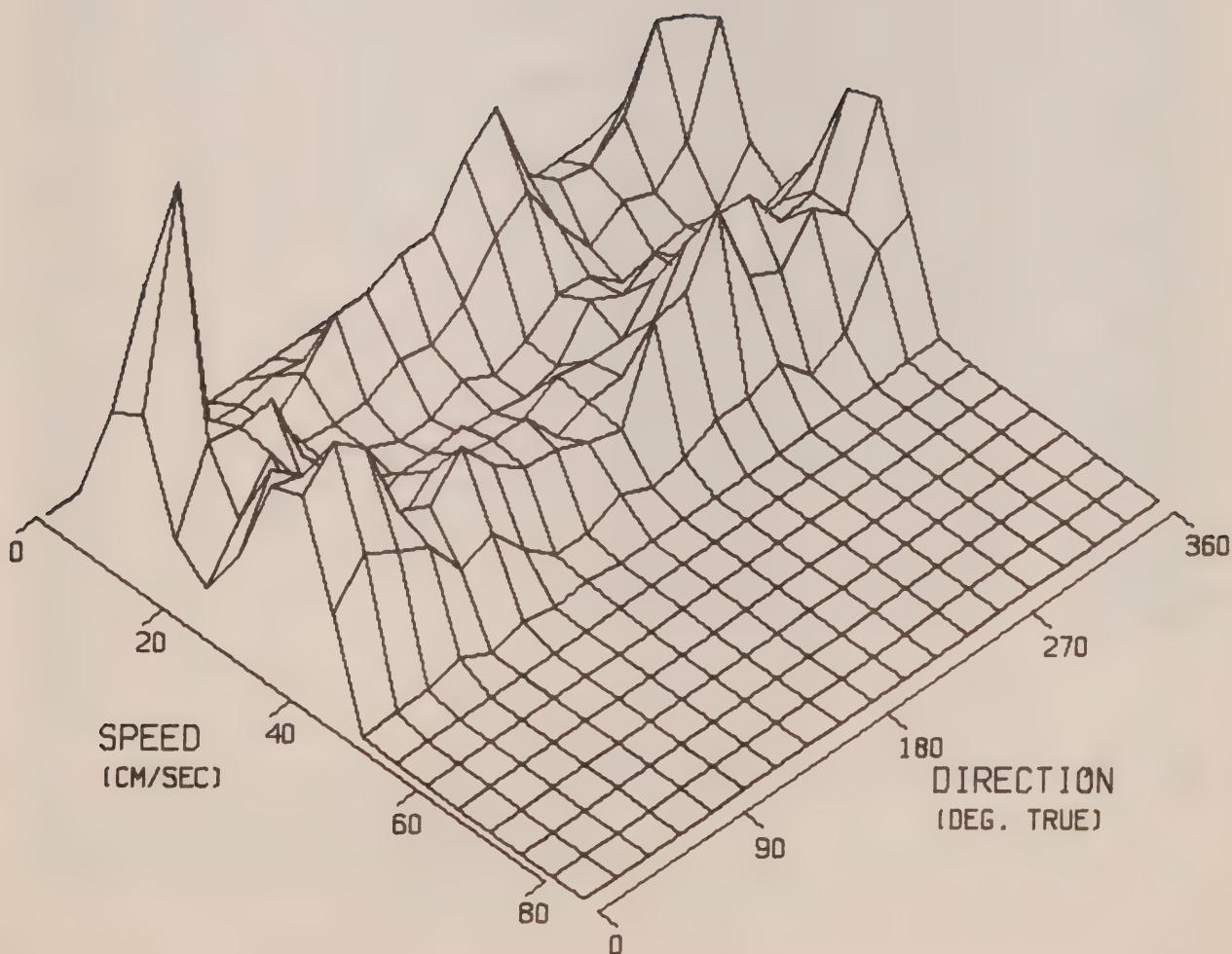
STARTING DATE: 5/ 2/73    ENDING DATE: 26/ 2/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 5/ 2/73

NO. OF SAMPLES = 3000



STN. NO. HS-53 DEPTH 15 M.

STARTING DATE: 5/ 2/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	007	058	036	027	051	049	001						229
15- 29	011	095	051	042	057	045	002						303
30- 44	023	088	036	032	042	035	002						258
45- 59	011	021	037	026	036	044	002						177
60- 74	011	011	031	034	026	028	001						142
75- 89	003	019	018	016	016	021							93
90-104	005	006	009	018	030	032	002						102
105-119	004	012	009	010	023	019							77
120-134	007	015	002	014	025	015							78
135-149	004	018	003	015	021	008	001						70
150-164	008	013	007	007	021	006							62
165-179	008	024	010	010	014	009							75
180-194	003	025	003	006	014	008							59
195-209	007	028	006	011	016	004							72
210-224	004	041	008	011	026	006							96
225-239	014	051	010	013	028	011							127
240-254	011	042	017	016	042	015							143
255-269	010	025	012	019	059	021							146
270-284	009	012	005	021	047	009							103
285-299	004	021	008	020	044	015							112
300-314	003	018	011	019	030	011							92
315-329	009	016	005	019	031	017							97
330-344	014	034	003	017	034	022							124
345-359	010	043	012	020	039	039							163

200 349 772 11 0 0 0 3000  
736 443 489 0 0 0 0

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-58 DEPTH 15M. START DATE 05/02/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
7	0	0	.	.	.	.	.
21	3	0	*				
35	11	0	**				
49	47	2	*****				
63	67	2	*****				
77	121	4	*****				
91	171	6	*****				
105	138	5	*****				
119	143	5	*****				
133	103	3	*****				
147	107	4	*****				
161	79	3	*****				
175	70	2	*****				
189	89	3	*****				
203	41	1	*****				
217	51	2	*****				
231	44	1	*****				
245	41	1	*****				
259	74	2	*****				
273	55	2	*****				
287	96	3	*****				
301	97	3	*****				
315	102	3	*****				
329	84	3	*****				
343	121	4	*****				
357	165	6	*****				
371	133	4	*****				
385	199	7	*****				
399	126	4	*****				
413	105	4	*****				
427	124	4	*****				
441	83	3	*****				
455	72	2	*****				
469	25	1	*****				
483	7	0	*				
497	6	0	*				
511	0	0					
525	0	0					
539	0	0					
553	0	0					

NO. OF SAMPLES OVER 540 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-55 DEPTH 15M. START DATE 05/02/73

MEDIAN (DEG.T)	FREQINCY NO. PCT	50	100	150	200	250
5	152 5	*****				
15	188 6	*****				
25	209 7	*****				
35	174 6	*****				
45	152 5	*****				
55	103 3	*****				
65	101 3	*****				
75	64 2	*****				
85	68 2	*****				
95	60 2	*****				
105	64 2	*****				
115	50 2	*****				
125	54 2	*****				
135	51 2	*****				
145	45 2	*****				
155	47 2	*****				
165	46 2	*****				
175	40 1	*****				
185	41 1	*****				
195	51 2	*****				
205	40 1	*****				
215	64 2	*****				
225	78 3	*****				
235	93 3	*****				
245	98 3	*****				
255	93 3	*****				
265	90 3	*****				
275	70 2	*****				
285	68 2	*****				
295	76 3	*****				
305	58 2	*****				
315	64 2	*****				
325	69 2	*****				
335	76 3	*****				
345	96 3	*****				
355	107 4	*****				
365	0 0					
375	0 0					
385	0 0					
395	0 0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-58 DEPTH 15M, START DATE 05/02/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	60	120	180	240	300
6.42	0	0	.	.	.	.	.
6.46	7	0	*				
6.50	41	1	*****				
6.54	159	5	*****				
6.58	139	5	*****				
6.62	55	2	*****				
6.66	156	5	*****				
6.70	226	8	*****				
6.74	237	8	*****				
6.78	154	5	*****				
6.82	242	8	*****				
6.86	296	10	*****				
6.90	133	4	*****				
6.94	189	6	*****				
6.98	83	3	*****				
7.02	165	6	*****				
7.06	227	8	*****				
7.10	190	6	*****				
7.14	46	2	*****				
7.18	146	5	*****				
7.22	64	2	*****				
7.26	32	1	*****				
7.30	6	0	*				
7.34	7	0	*				
7.38	0	0					
7.42	0	0					
7.46	0	0					
7.50	0	0					
7.54	0	0					
7.58	0	0					
7.62	0	0					
7.66	0	0					
7.70	0	0					
7.74	0	0					
7.78	0	0					
7.82	0	0					
7.86	0	0					
7.90	0	0					
7.94	0	0					
7.98	0	0					

NO. OF SAMPLES OVER 8.00 = 0  
 NO. OF SAMPLES UNDER 6.40 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-55 DEPTH 15M, START DATE 05/02/73

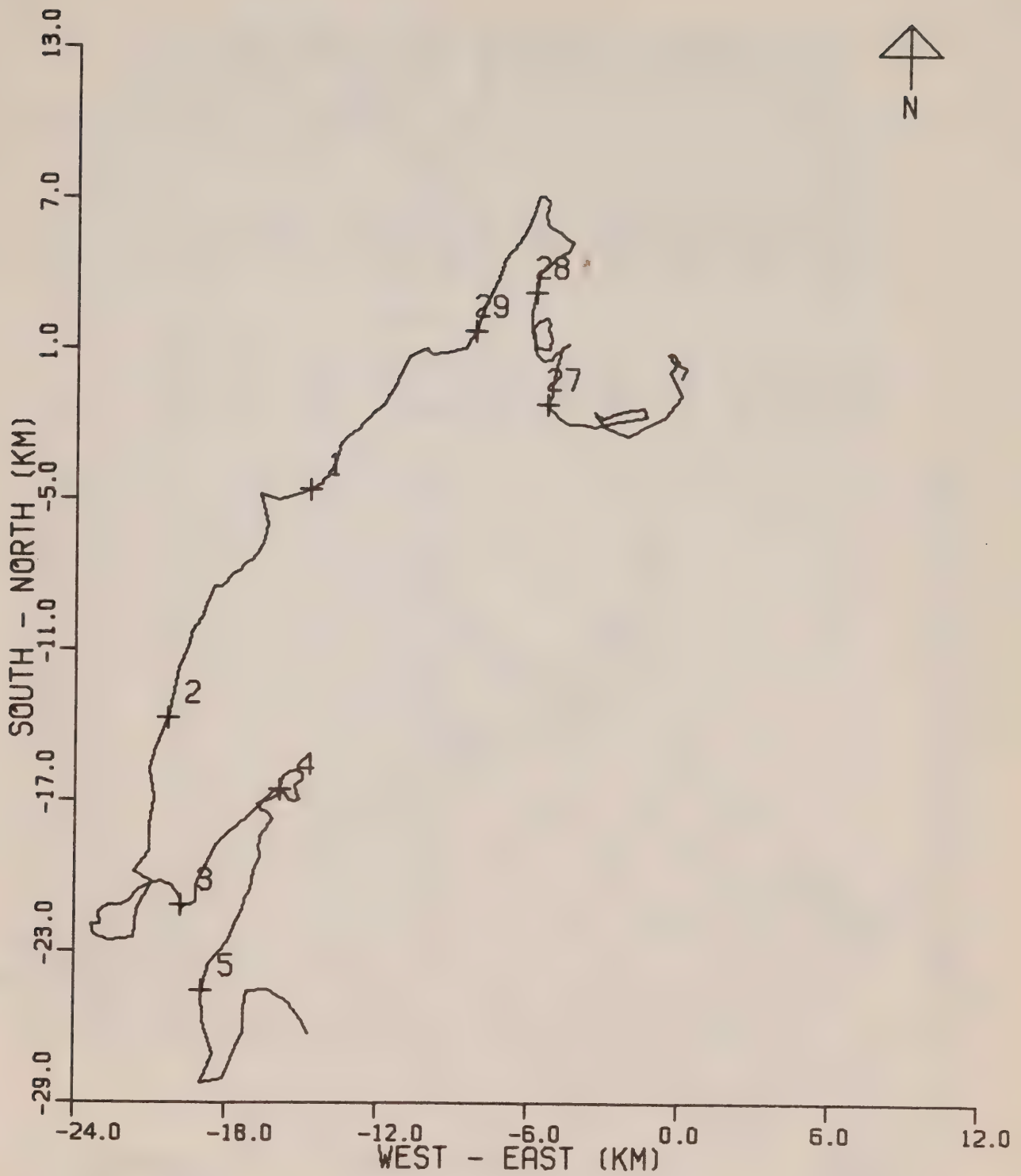
MEDIAN (PPT)	FREQUENCY NO. PCT	40	80	120	160	200
28.17	0 0	.	.	.	.	.
28.21	0 0					
28.25	5 0	*				
28.29	50 2	*****				
28.33	11 0	***				
28.37	60 2	*****				
28.41	44 1	*****				
28.45	28 1	*****				
28.49	77 3	*****				
28.53	64 2	*****				
28.57	104 3	*****				
28.61	35 1	*****				
28.65	139 5	*****				
28.69	93 3	*****				
28.73	107 4	*****				
28.77	83 3	*****				
28.81	94 3	*****				
28.85	82 3	*****				
28.89	83 3	*****				
28.93	100 3	*****				
28.97	83 3	*****				
29.01	81 3	*****				
29.05	118 4	*****				
29.09	132 4	*****				
29.13	92 3	*****				
29.17	86 3	*****				
29.21	70 2	*****				
29.25	111 4	*****				
29.29	104 3	*****				
29.33	83 3	*****				
29.37	96 3	*****				
29.41	110 4	*****				
29.45	148 5	*****				
29.49	165 6	*****				
29.53	66 2	*****				
29.57	108 4	*****				
29.61	47 2	*****				
29.65	17 1	***				
29.69	8 0	**				
29.73	16 1	***				

NO. OF SAMPLES OVER 29.75 = 0

NO. OF SAMPLES UNDER 28.15 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 15 M.

STARTING DATE: 26/ 2/73      ENDING DATE: 5/ 3/73

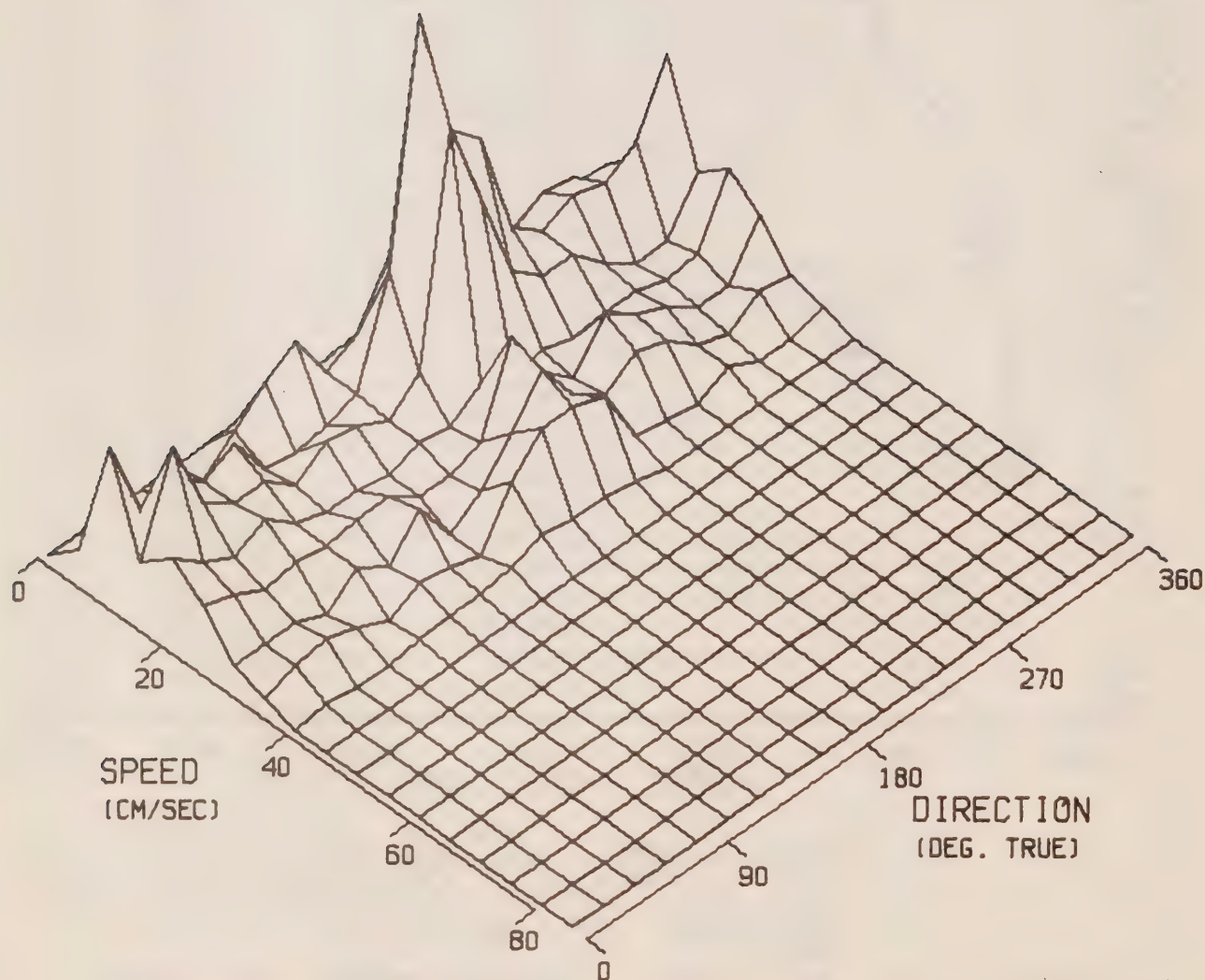


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 26/ 2/73

NO. OF SAMPLES = 1218



STN. NO. HS-53 DEPTH 15 M.

STARTING DATE: 26/ 2/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED											
	000	080	160	240	320	400	480	560	640	720	800	880
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO
	079	159	239	319	399	479	559	639	719	799	879	959
0- 14	004	034	018	004	003							63
15- 29		027	010	008	003							48
30- 44	004	022	012	006	003							47
45- 59	001	012	009	006	004							32
60- 74	002	018	010	002	001							33
75- 89	002	013	007	011	001							34
90-104	004	004	006	004	003							21
105-119	007	010	007	005	003							32
120-134	016	005	003	011	001							36
135-149	010	007	005	002	002							26
150-164	006	007	004	003	010							30
165-179	004	010	007	005	012	001						39
180-194	012	046	010	021	014							103
195-209	020	076	021	023	014							154
210-224	024	049	017	008	014							112
225-239	026	052	008	008	006							100
240-254	013	026	006	011								56
255-269	003	019	004	020	001							47
270-284	007	018	007	012								44
285-299	004	013	005	009	003							34
300-314	011	014	002	003	001							31
315-329	010	010	004	003								27
330-344	005	009	005	005								24
345-359	003	023	011	007	001							45
	198		198		100		0		0		0	1218
		524		197		1		0		0		0

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 15M, START DATE 26/02/73

MEDIAN (MM/S)	FREQUNCY NO. PCT .	30 .	60 .	90 .	120 .	150 .
5	0 0					
15	0 0					
25	0 0					
35	2 0	*				
45	10 1	***				
55	55 5	*****				
65	59 5	*****				
75	72 6	*****				
85	105 9	*****				
95	59 5	*****				
105	69 6	*****				
115	57 5	*****				
125	85 7	*****				
135	66 5	*****				
145	53 4	*****				
155	30 2	*****				
165	32 3	*****				
175	25 2	*****				
185	19 2	*****				
195	31 3	*****				
205	22 2	*****				
215	20 2	*****				
225	20 2	*****				
235	37 3	*****				
245	21 2	*****				
255	22 2	*****				
265	29 2	*****				
275	22 2	*****				
285	25 2	*****				
295	21 2	*****				
305	27 2	*****				
315	22 2	*****				
325	7 1	**				
335	25 2	*****				
345	19 2	*****				
355	19 2	*****				
365	8 1	***				
375	16 1	*****				
385	3 0	*				
395	3 0	*				

NO. OF SAMPLES OVER 400 = 1  
 NO. OF SAMPLES UNDER, 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1218  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 15M. START DATE 26/02/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	30	60	90	120	150
5	43	4	*****	.	.	.	.
15	45	4	*****				
25	27	2	*****				
35	31	3	*****				
45	23	2	*****				
55	24	2	*****				
65	21	2	*****				
75	16	1	*****				
85	28	2	*****				
95	12	1	****				
105	21	2	*****				
115	23	2	*****				
125	24	2	*****				
135	16	1	*****				
145	20	2	*****				
155	20	2	*****				
165	23	2	*****				
175	32	3	*****				
185	51	4	*****				
195	103	8	*****				
205	107	9	*****				
215	77	6	*****				
225	67	6	*****				
235	61	5	*****				
245	41	3	*****				
255	28	2	*****				
265	33	3	*****				
275	27	2	*****				
285	26	2	*****				
295	23	2	*****				
305	26	2	*****				
315	21	2	*****				
325	10	1	***				
335	14	1	*****				
345	19	2	*****				
355	35	3	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1218  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-58 DEPTH 15M, START DATE 26/02/73

MEDIAN (DEG.C)	FREQ NO.	PCT PCT	60	120	180	240	300
6.61	0	0	.	.	.	.	.
6.63	0	0					
6.65	0	0					
6.67	0	0					
6.69	21	2	****				
6.71	19	2	***				
6.73	98	8	*****				
6.75	227	19	*****				
6.77	221	18	*****				
6.79	0	0					
6.81	138	11	*****				
6.83	85	7	*****				
6.85	107	9	*****				
6.87	51	4	*****				
6.89	32	3	*****				
6.91	31	3	*****				
6.93	19	2	***				
6.95	9	1	**				
6.97	0	0					
6.99	12	1	**				
7.01	24	2	****				
7.03	17	1	***				
7.05	6	0	*				
7.07	45	4	*****				
7.09	44	4	*****				
7.11	12	1	**				
7.13	0	0					
7.15	0	0					
7.17	0	0					
7.19	0	0					
7.21	0	0					
7.23	0	0					
7.25	0	0					
7.27	0	0					
7.29	0	0					
7.31	0	0					
7.33	0	0					
7.35	0	0					
7.37	0	0					
7.39	0	0					

NO. OF SAMPLES OVER 7.40 = 0  
 NO. OF SAMPLES UNDER 6.60 = 0  
 TOTAL NO. OF OBSERVATIONS = 1218  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS=55 DEPTH 15M, START DATE 26/02/73

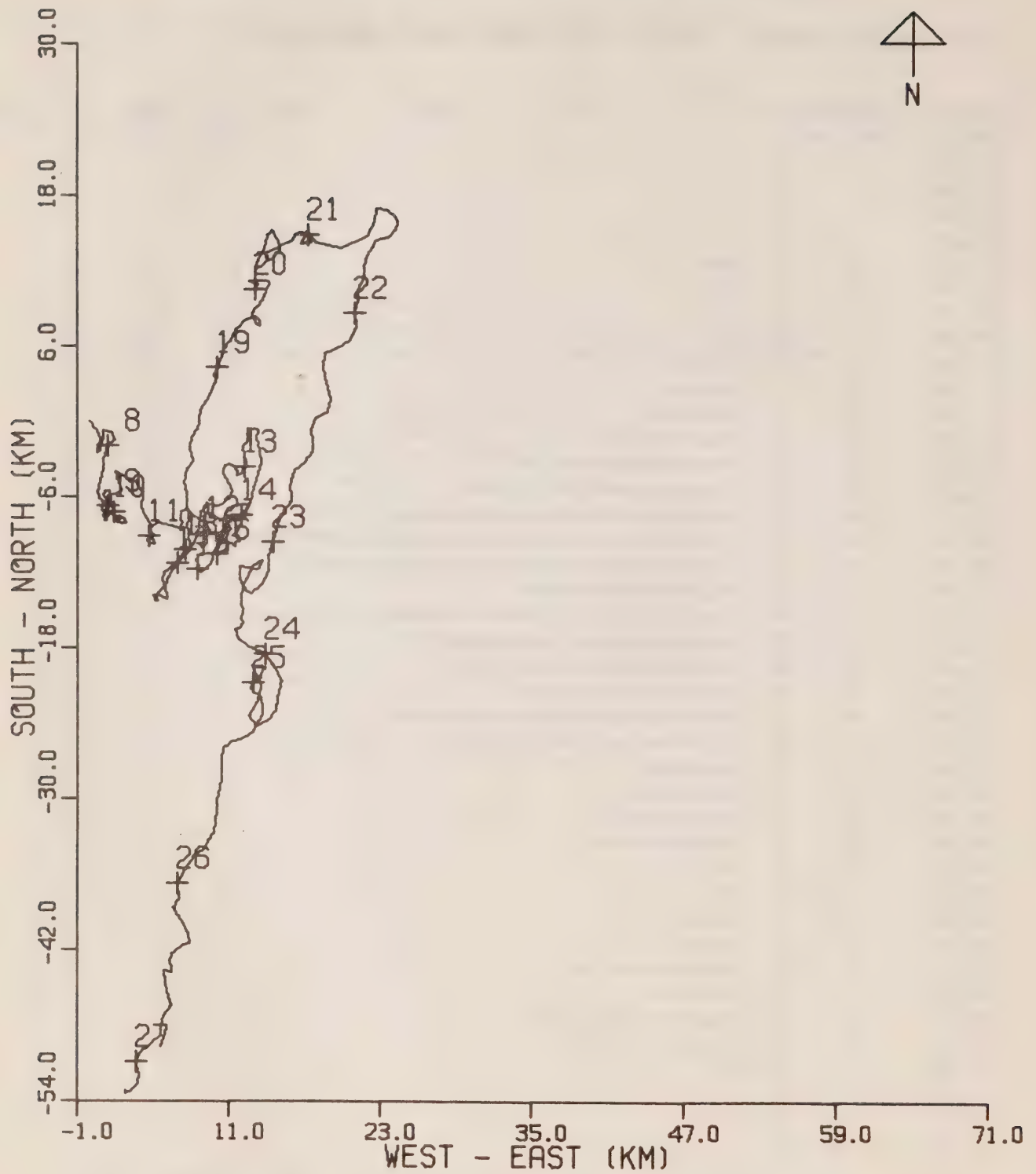
MEDIAN (PPT)	FREQUENCY NO.	PCT	30	60	90	120	150
27.43	0	0	.	.	.	.	.
27.49	0	0					
27.55	0	0					
27.61	0	0					
27.67	10	1	***				
27.73	11	1	****				
27.79	4	0	*				
27.85	6	0	**				
27.91	15	1	*****				
27.97	18	1	*****				
28.03	20	2	*****				
28.09	34	3	*****				
28.15	47	4	*****				
28.21	56	5	*****				
28.27	86	7	*****				
28.33	104	9	*****				
28.39	89	7	*****				
28.45	46	4	*****				
28.51	106	9	*****				
28.57	59	5	*****				
28.63	59	5	*****				
28.69	46	4	*****				
28.75	68	6	*****				
28.81	63	5	*****				
28.87	18	1	*****				
28.93	20	2	*****				
28.99	27	2	*****				
29.05	30	2	*****				
29.11	12	1	****				
29.17	6	0	**				
29.23	11	1	****				
29.29	17	1	*****				
29.35	32	3	*****				
29.41	17	1	*****				
29.47	41	3	*****				
29.53	33	3	*****				
29.59	7	1	**				
29.65	0	0					
29.71	0	0					
29.77	0	0					

NO. OF SAMPLES OVER 29.80 = 0

NO. OF SAMPLES UNDER 27.40 = 0

TOTAL NO. OF OBSERVATIONS = 1218

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 15 M.

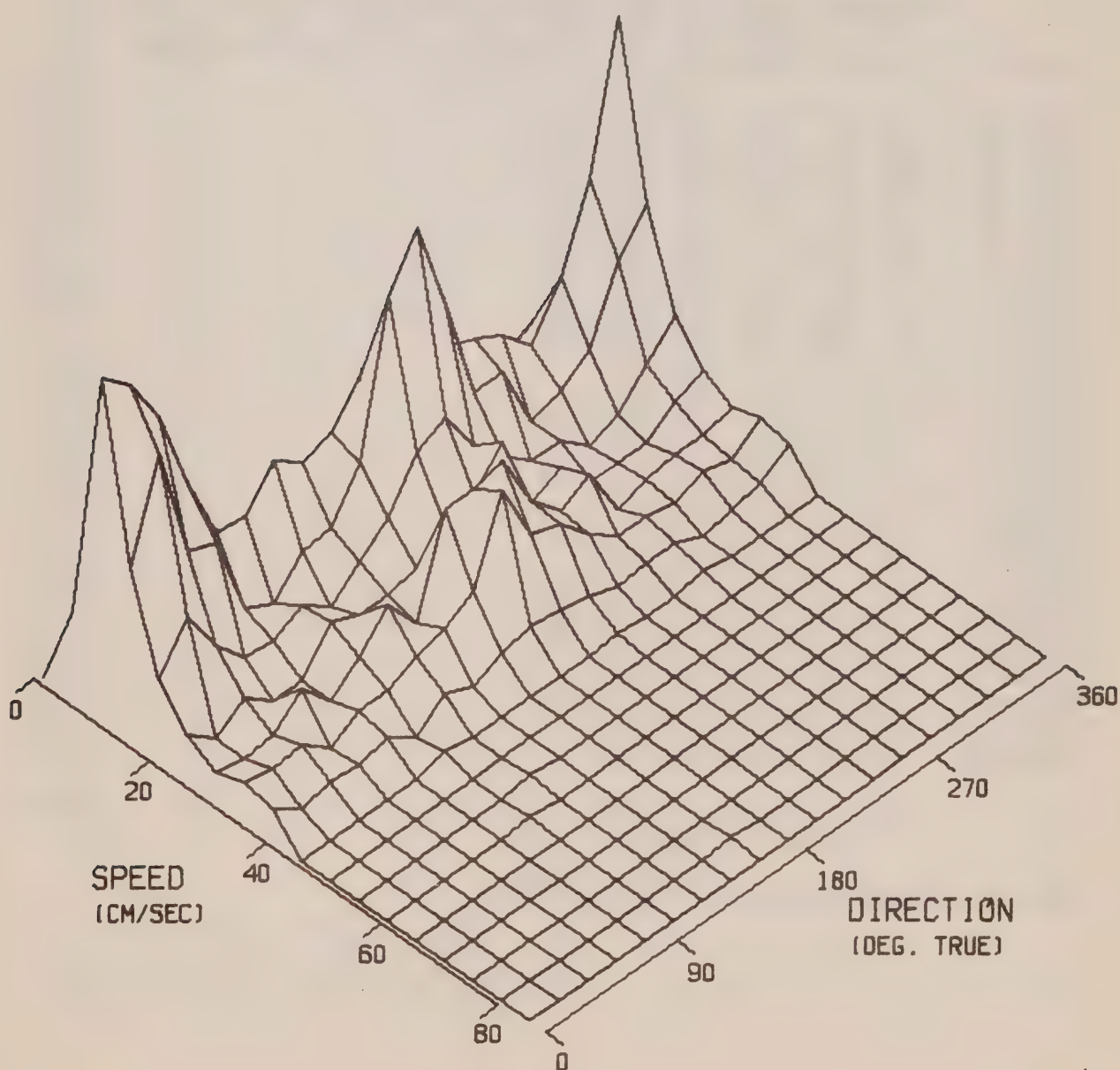
STARTING DATE: 7/ 3/73      ENDING DATE: 27/ 3/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 7/ 3/73

NO. OF SAMPLES = 2875





STN. NO. HS-58 DEPTH 15 M.

STARTING DATE: 7/ 3/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	022	085	031	008	012	001							159
15- 29	023	111	045	007	009	001							196
30- 44	025	088	028	010	011	001							163
45- 59	008	069	020	010	008	001							116
60- 74	009	042	012	012	009	001							85
75- 89	007	032	011	004	005	004							63
90-104	007	027	013	009	008	001							65
105-119	013	034	013	025	007	002	002						96
120-134	010	036	022	019	012	002							101
135-149	008	033	016	016	017								90
150-164	008	044	024	027	014				001				118
165-179	018	061	034	036	039	004							192
180-194	012	065	062	043	032	003							217
195-209	007	093	059	038	023	002							222
210-224	008	086	039	041	026								200
225-239	017	044	029	016	011	001							118
240-254	004	047	012	020	010								93
255-269	006	043	011	017	007	002							86
270-284	006	028	010	005	005	002							56
285-299	004	017	007	003	008	004							43
300-314	009	023	005	003	004								44
315-329	015	042	006	006	007	002							78
330-344	016	060	017	008	004								105
345-359	019	095	026	015	014								169

281	552	302	0	0	0	0	2875
1305	398	34	2	1	0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 15M. START DATE 07/03/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	70	140	210	280	350
6	0	0	.	.	.	.	.
18	3	0					
30	8	0	*				
42	28	1	*****				
54	66	2	*****				
66	121	4	*****				
78	111	4	*****				
90	187	7	*****				
102	264	9	*****				
114	212	7	*****				
126	214	7	*****				
138	171	6	*****				
150	153	5	*****				
162	127	4	*****				
174	116	4	*****				
186	94	3	*****				
198	84	3	*****				
210	65	2	*****				
222	70	2	*****				
234	64	2	*****				
246	38	1	*****				
258	47	2	*****				
270	51	2	*****				
282	76	3	*****				
294	65	2	*****				
306	59	2	*****				
318	68	2	*****				
330	68	2	*****				
342	47	2	*****				
354	55	2	*****				
366	51	2	*****				
378	32	1	*****				
390	23	1	***				
402	13	0	**				
414	10	0	*				
426	8	0	*				
438	3	0					
450	0	0					
462	0	0					
474	0	0					

NO. OF SAMPLES OVER 480 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2875  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-59 DEPTH 15M. START DATE 07/03/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	40	80	120	160	200
5	122	4	*****				
15	111	4	*****				
25	136	5	*****				
35	113	4	*****				
45	81	3	*****				
55	79	3	*****				
65	57	2	*****				
75	41	1	*****				
85	45	2	*****				
95	43	1	*****				
105	62	2	*****				
115	64	2	*****				
125	71	2	*****				
135	67	2	*****				
145	48	2	*****				
155	77	3	*****				
165	108	4	*****				
175	134	5	*****				
185	142	5	*****				
195	144	5	*****				
205	150	5	*****				
215	141	5	*****				
225	97	3	*****				
235	77	3	*****				
245	51	2	*****				
255	68	2	*****				
265	56	2	*****				
275	38	1	*****				
285	33	1	*****				
295	26	1	*****				
305	31	1	*****				
315	38	1	*****				
325	55	2	*****				
335	68	2	*****				
345	87	3	*****				
355	114	4	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2875  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-58 DEPTH 15M, START DATE 07/03/73

MEDIAN (DEG.C)	FREQINCY NO.	PCT .	90	180	270	360	450
6.61	0	0	.	.	.	.	.
6.63	0	0					
6.65	0	0					
6.67	0	0					
6.69	0	0					
6.71	0	0					
6.73	0	0					
6.75	1	0					
6.77	8	0	*				
6.79	0	0					
6.81	71	2	*****				
6.83	175	6	*****				
6.85	164	6	*****				
6.87	267	9	*****				
6.89	399	14	*****				
6.91	409	14	*****				
6.93	176	6	*****				
6.95	174	6	*****				
6.97	0	0					
6.99	182	6	*****				
7.01	204	7	*****				
7.03	132	5	*****				
7.05	124	4	*****				
7.07	122	4	*****				
7.09	144	5	*****				
7.11	89	3	*****				
7.13	0	0					
7.15	16	1	**				
7.17	18	1	**				
7.19	0	0					
7.21	0	0					
7.23	0	0					
7.25	0	0					
7.27	0	0					
7.29	0	0					
7.31	0	0					
7.33	0	0					
7.35	0	0					
7.37	0	0					
7.39	0	0					

NO. OF SAMPLES OVER 7.40 = 0  
 NO. OF SAMPLES UNDER 6.60 = 0  
 TOTAL NO. OF OBSERVATIONS = 2875  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF SALINITY

HOWE SOUND HS-55 DEPTH 15M, START DATE 07/03/73

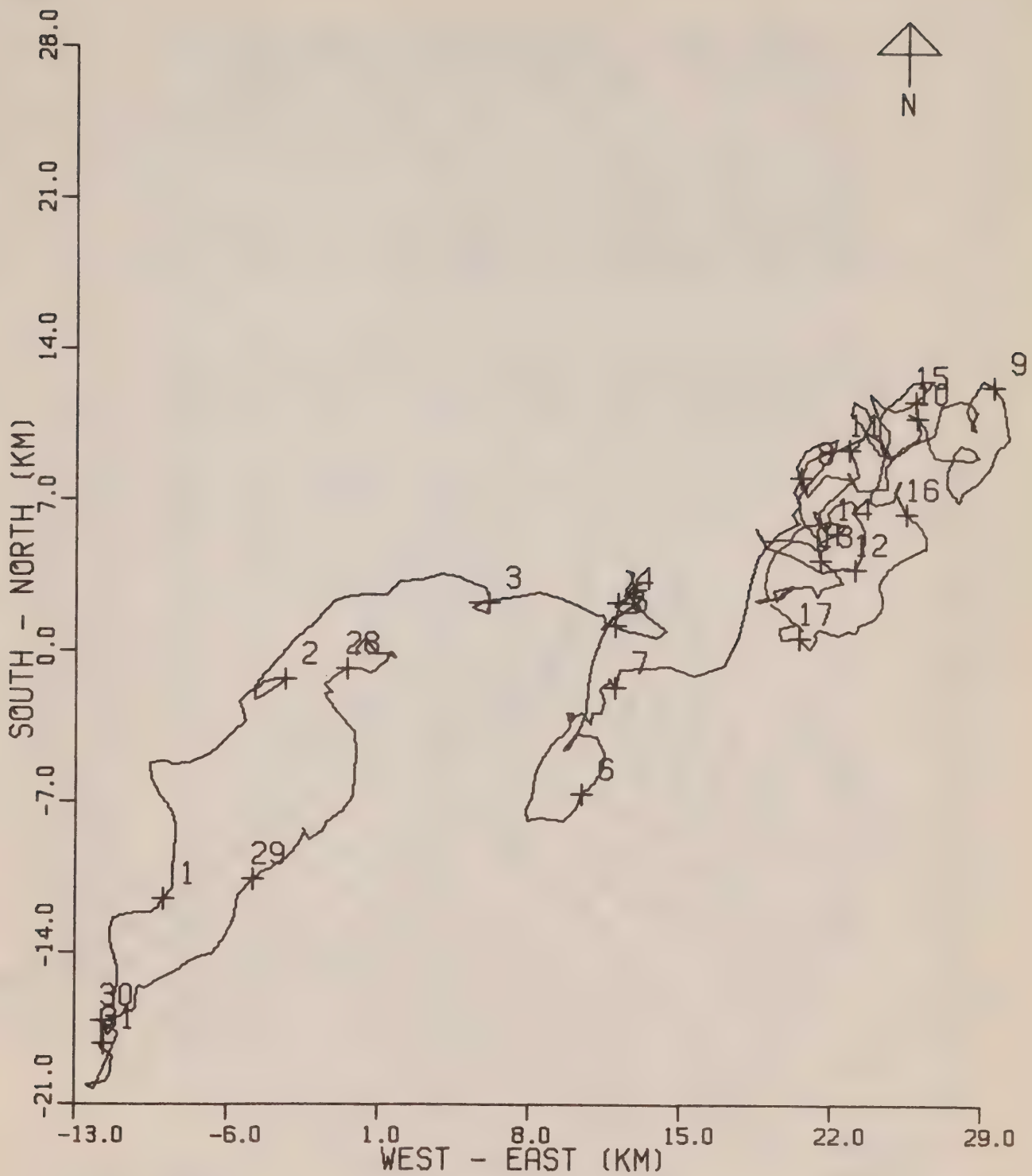
MEDIAN (PPT)	FREQINCY NO. PCT	70	140	210	280	350
25.55	0 0	.	.	.	.	.
25.65	0 0					
25.75	0 0					
25.85	1 0					
25.95	1 0					
26.05	9 0	*				
26.15	5 0	*				
26.25	9 0	*				
26.35	17 1	**				
26.45	13 0	**				
26.55	12 0	**				
26.65	19 1	***				
26.75	12 0	**				
26.85	11 0	**				
26.95	15 1	**				
27.05	22 1	***				
27.15	12 0	**				
27.25	11 0	**				
27.35	13 0	**				
27.45	21 1	***				
27.55	20 1	***				
27.65	12 0	**				
27.75	31 1	****				
27.85	34 1	*****				
27.95	51 2	*****				
28.05	48 2	*****				
28.15	103 4	*****				
28.25	187 7	*****				
28.35	168 6	*****				
28.45	342 12	*****				
28.55	275 10	*****				
28.65	171 6	*****				
28.75	255 9	*****				
28.85	256 9	*****				
28.95	133 5	*****				
29.05	128 4	*****				
29.15	82 3	*****				
29.25	224 8	*****				
29.35	135 5	*****				
29.45	17 1	**				

NO. OF SAMPLES OVER 29.50 = 0

NO. OF SAMPLES UNDER 25.50 = 0

TOTAL NO. OF OBSERVATIONS = 2875

SAMPLE INTERVAL = 10 MINUTES



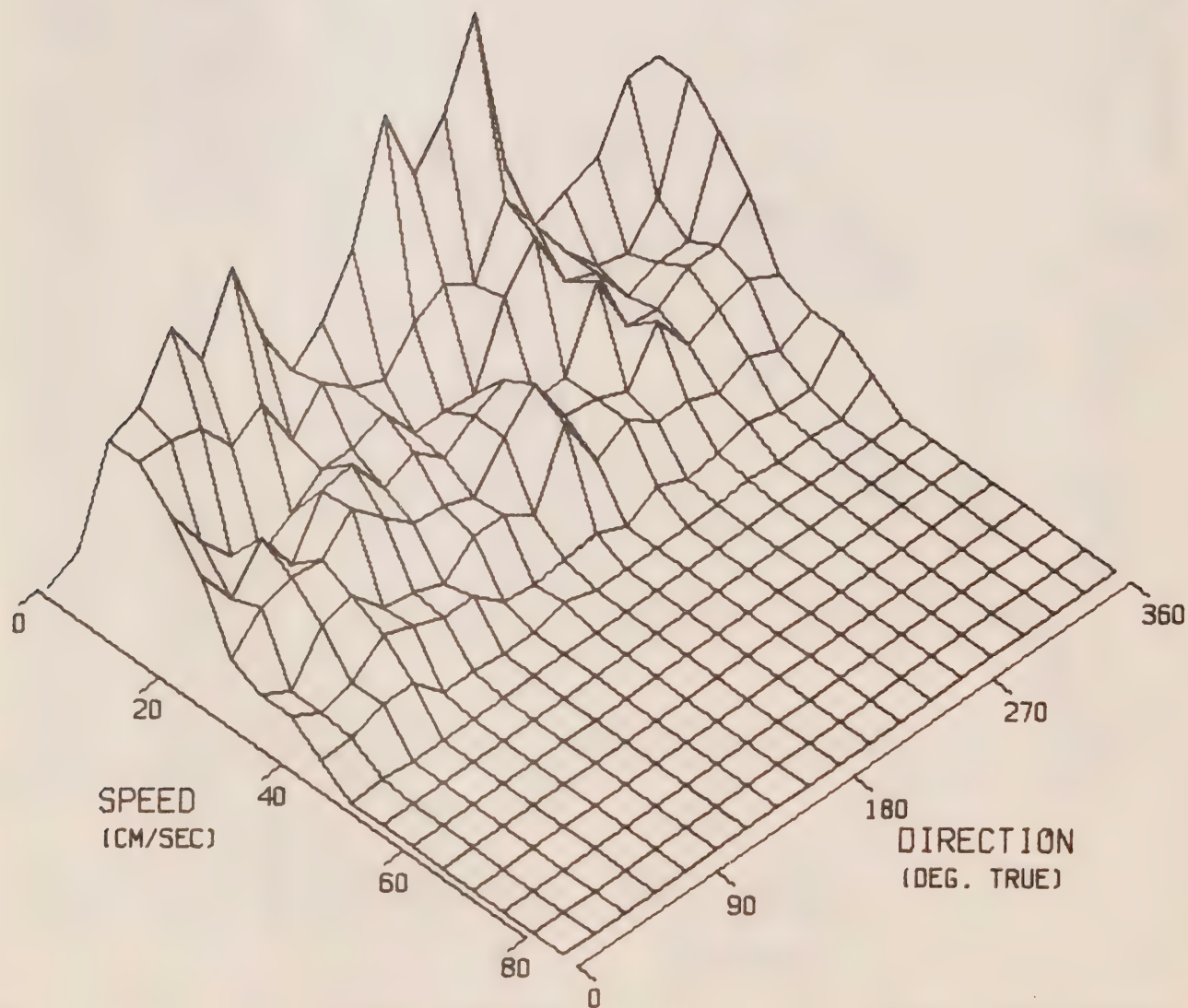
STN. NO. HS-5S

DEPTH 15 M.

STARTING DATE: 27/ 3/73    ENDING DATE: 17/ 4/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.  
STARTING DATE: 27/ 3/73  
NO. OF SAMPLES = 3000



STN. NO. H8-58 DEPTH 15 M.

STARTING DATE: 27/ 3/73  
SAMPLE INTERVAL = 10 MIN.

FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED											
	000	080	160	240	320	400	480	560	640	720	800	880
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO
	079	159	239	319	399	479	559	639	719	799	879	959
0- 14	011	060	046	029	012	008						166
15- 29	017	055	023	025	009	007	001					137
30- 44	006	069	033	025	015	008						156
45- 59	007	051	021	026	019	013						137
60- 74	011	056	020	025	016	013						141
75- 89	009	072	024	029	013	006						153
90-104	008	047	029	032	011	005						132
105-119	007	041	022	020	012							102
120-134	007	032	032	015	011	002						99
135-149	012	042	035	022	007							118
150-164	014	048	024	022	010	002						120
165-179	015	049	017	015	008	001						105
180-194	015	061	022	033	014							145
195-209	016	068	022	030	016	003						155
210-224	011	060	028	021	009							129
225-239	006	080	042	020	010	002						160
240-254	011	068	044	013	013							149
255-269	015	047	040	018	006							126
270-284	007	030	019	024	012							92
285-299	015	038	022	015	007	001						98
300-314	008	022	018	016	010							74
315-329	006	031	020	020	009	001						87
330-344	006	044	019	026	005	001						101
345-359	013	045	030	015	009	003						115
	253	652	263	1	0	0	0	0	0	0	2997	
	1216	536	76	0	0	0	0	0	0	0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 3



## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 15M, START DATE 27/03/73

MEDIAN (MM/S)	FREQUENCY NO. PCT .	80 .	160 .	240 .	320 .	400 .
7	0 0					
21	2 0					
35	6 0	*				
49	65 2	*****				
63	103 3	*****				
77	141 5	*****				
91	304 10	*****				
105	219 7	*****				
119	282 9	*****				
133	137 5	*****				
147	167 6	*****				
161	122 4	*****				
175	102 3	*****				
189	117 4	*****				
203	100 3	*****				
217	132 4	*****				
231	122 4	*****				
245	86 3	*****				
259	98 3	*****				
273	85 3	*****				
287	109 4	*****				
301	87 3	*****				
315	98 3	*****				
329	76 3	*****				
343	54 2	*****				
357	46 2	*****				
371	25 1	***				
385	29 1	***				
399	18 1	**				
413	19 1	**				
427	25 1	***				
441	7 0	*				
455	9 0	*				
469	4 0	*				
483	1 0					
497	0 0					
511	0 0					
525	0 0					
539	0 0					
553	0 0					

NO. OF SAMPLES OVER 560 = 3  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-58 DEPTH 15M. START DATE 27/03/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	30	60	90	120	150
5	126	4	*****	*****	*****	*****	*****
15	96	3	*****	*****	*****	*****	*****
25	91	3	*****	*****	*****	*****	*****
35	96	3	*****	*****	*****	*****	*****
45	109	4	*****	*****	*****	*****	*****
55	89	3	*****	*****	*****	*****	*****
65	92	3	*****	*****	*****	*****	*****
75	93	3	*****	*****	*****	*****	*****
85	110	4	*****	*****	*****	*****	*****
95	89	3	*****	*****	*****	*****	*****
105	72	2	*****	*****	*****	*****	*****
115	67	2	*****	*****	*****	*****	*****
125	75	3	*****	*****	*****	*****	*****
135	65	2	*****	*****	*****	*****	*****
145	83	3	*****	*****	*****	*****	*****
155	68	2	*****	*****	*****	*****	*****
165	77	3	*****	*****	*****	*****	*****
175	75	3	*****	*****	*****	*****	*****
185	109	4	*****	*****	*****	*****	*****
195	86	3	*****	*****	*****	*****	*****
205	112	4	*****	*****	*****	*****	*****
215	85	3	*****	*****	*****	*****	*****
225	86	3	*****	*****	*****	*****	*****
235	115	4	*****	*****	*****	*****	*****
245	105	4	*****	*****	*****	*****	*****
255	81	3	*****	*****	*****	*****	*****
265	89	3	*****	*****	*****	*****	*****
275	61	2	*****	*****	*****	*****	*****
285	71	2	*****	*****	*****	*****	*****
295	54	2	*****	*****	*****	*****	*****
305	52	2	*****	*****	*****	*****	*****
315	58	2	*****	*****	*****	*****	*****
325	53	2	*****	*****	*****	*****	*****
335	74	2	*****	*****	*****	*****	*****
345	62	2	*****	*****	*****	*****	*****
355	74	2	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 3000  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-55 DEPTH 15M. START DATE 27/03/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	160	320	480	640	800
6.91	0	0	.	.	.	.	.
6.93	0	0					
6.95	0	0					
6.97	0	0					
6.99	0	0					
7.01	0	0					
7.03	0	0					
7.05	10	0	*				
7.07	15	1	*				
7.09	105	4	*****				
7.11	141	5	*****				
7.13	0	0					
7.15	162	5	*****				
7.17	361	12	*****				
7.19	672	22	*****				
7.21	310	10	*****				
7.23	148	5	*****				
7.25	118	4	*****				
7.27	120	4	*****				
7.29	96	3	*****				
7.31	0	0					
7.33	111	4	*****				
7.35	87	3	*****				
7.37	136	5	*****				
7.39	130	4	*****				
7.41	81	3	*****				
7.43	55	2	***				
7.45	41	1	***				
7.47	0	0					
7.49	44	1	***				
7.51	23	1	*				
7.53	11	0	*				
7.55	6	0					
7.57	6	0					
7.59	5	0					
7.61	6	0					
7.63	0	0					
7.65	0	0					
7.67	0	0					
7.69	0	0					

NO. OF SAMPLES OVER 7.70 = 0

NO. OF SAMPLES UNDER 6.90 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-5S DEPTH 15M. START DATE 27/03/73

MEDIAN (PPT)	FREQUENCY NO. PCT	60	120	180	240	300
27.83	0 0	.	.	.	.	.
27.89	0 0					
27.95	3 0	*				
28.01	8 0	*				
28.07	6 0	*				
28.13	22 1	*****				
28.19	33 1	*****				
28.25	75 3	*****				
28.31	75 3	*****				
28.37	91 3	*****				
28.43	89 3	*****				
28.49	135 5	*****				
28.55	127 4	*****				
28.61	243 8	*****				
28.67	273 9	*****				
28.73	280 9	*****				
28.79	217 7	*****				
28.85	137 5	*****				
28.91	203 7	*****				
28.97	69 2	*****				
29.03	95 3	*****				
29.09	57 2	*****				
29.15	94 3	*****				
29.21	121 4	*****				
29.27	85 3	*****				
29.33	42 1	*****				
29.39	32 1	*****				
29.45	113 4	*****				
29.51	156 5	*****				
29.57	102 3	*****				
29.63	17 1	***				
29.69	0 0					
29.75	0 0					
29.81	0 0					
29.87	0 0					
29.93	0 0					
29.99	0 0					
30.05	0 0					
30.11	0 0					
30.17	0 0					

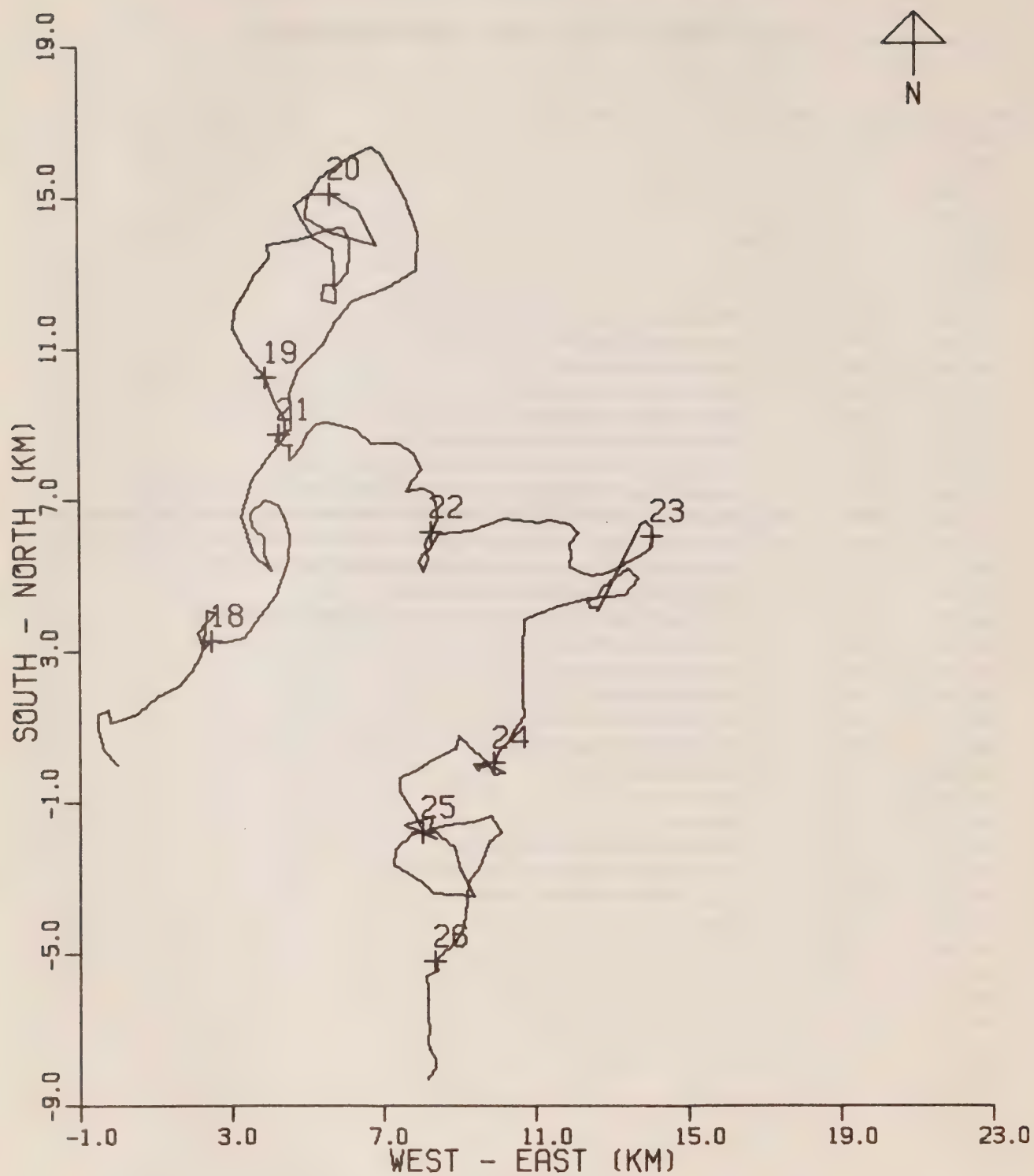
NO. OF SAMPLES OVER 30.20 = 0

NO. OF SAMPLES UNDER 27.80 = 0

TOTAL NO. OF OBSERVATIONS = 3000

SAMPLE INTERVAL = 10 MINUTES





STN. NO. HS-5S

DEPTH 15 M.

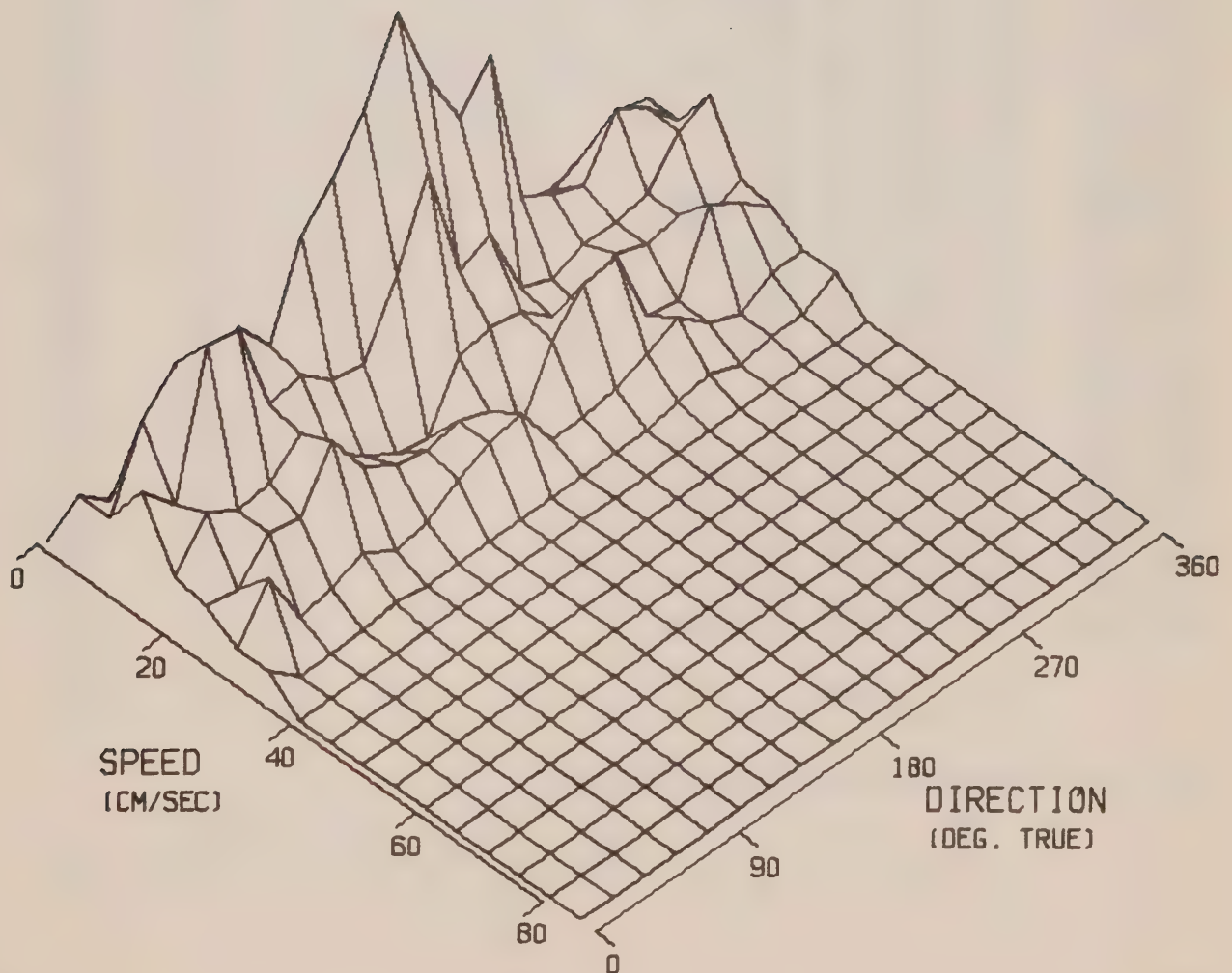
STARTING DATE: 17/ 4/73    ENDING DATE: 26/ 4/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 17/ 4/73

NO. OF SAMPLES = 1331



STN. NO. HS-58 DEPTH 15 M.

STARTING DATE: 17/ 4/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

DIR	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO	
	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	005	023	012	010									50
15- 29	008	021	015	008									52
30- 44	010	034	015	014									73
45- 59	002	033	017	003									55
60- 74	006	035	012	009									62
75- 89	008	025	024	013	001								71
90-104	007	025	014	011									57
105-119	009	025	008	007									49
120-134	006	030	007	008									51
135-149	010	040	005	006	001								62
150-164	010	041	003	011	001								66
165-179	012	058	011	011									92
180-194	012	056	017	005									90
195-209	006	035	011	002									54
210-224	006	037	016	007									66
225-239	005	031	007	011									54
240-254	002	028	006	014									50
255-269	004	016	008	011	002								41
270-284	006	011	009	007	001								34
285-299	004	007	015	006	001								33
300-314	007	010	008	003	001								29
315-329	006	022	008	010									46
330-344	009	024	011	006									50
345-359	010	007	007	011	005								40
	170		266		13		0		0		0		1327
		674		204		0		0		0		0	

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 4

## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 15M, START DATE 17/04/73

MEDIAN (MM/S)	FREQUENCY NO. PCT .	30	60	90	120	150
5	0 0	.	.	.	.	.
15	1 0					
25	1 0					
35	11 1	*****				
45	9 1	***				
55	49 4	*****				
65	39 3	*****				
75	60 5	*****				
85	115 9	*****				
95	89 7	*****				
105	116 9	*****				
115	82 6	*****				
125	93 7	*****				
135	64 5	*****				
145	76 6	*****				
155	39 3	*****				
165	37 3	*****				
175	44 3	*****				
185	35 3	*****				
195	40 3	*****				
205	25 2	*****				
215	42 3	*****				
225	21 2	*****				
235	34 3	*****				
245	24 2	*****				
255	35 3	*****				
265	44 3	*****				
275	24 2	*****				
285	31 2	*****				
295	12 1	*****				
305	16 1	*****				
315	6 0	**				
325	6 0	**				
335	1 0					
345	3 0	*				
355	2 0	*				
365	1 0					
375	0 0					
385	0 0					
395	0 0					

NO. OF SAMPLES OVER 400 = 4  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 1331  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5S DEPTH 15M. START DATE 17/04/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	20	40	60	80	100
5	38	3	*****				
15	30	2	*****				
25	40	3	*****				
35	48	4	*****				
45	42	3	*****				
55	37	3	*****				
65	44	3	*****				
75	44	3	*****				
85	45	3	*****				
95	39	3	*****				
105	29	2	*****				
115	34	3	*****				
125	38	3	*****				
135	37	3	*****				
145	40	3	*****				
155	42	3	*****				
165	57	4	*****				
175	66	5	*****				
185	59	4	*****				
195	45	3	*****				
205	37	3	*****				
215	43	3	*****				
225	39	3	*****				
235	36	3	*****				
245	40	3	*****				
255	26	2	*****				
265	25	2	*****				
275	24	2	*****				
285	25	2	*****				
295	20	2	*****				
305	18	1	*****				
315	26	2	*****				
325	34	3	*****				
335	32	2	*****				
345	30	2	*****				
355	22	2	*****				
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0

NO. OF SAMPLES UNDER 0 = 0

TOTAL NO. OF OBSERVATIONS = 1331

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-55 DEPTH 15M. START DATE 17/04/73

MEDIAN (DEG.C)	FREQ NO.	PCT	50	100	150	200	250
7.02	0	0	.	.	.	.	.
7.06	0	0					
7.10	0	0					
7.14	1	0					
7.18	225	17	*****				
7.22	245	18	*****				
7.26	124	9	*****				
7.30	42	3	*****				
7.34	58	4	*****				
7.38	80	6	*****				
7.42	81	6	*****				
7.46	38	3	*****				
7.50	63	5	*****				
7.54	56	4	*****				
7.58	48	4	*****				
7.62	26	2	*****				
7.66	12	1	**				
7.70	36	3	*****				
7.74	15	1	**				
7.78	40	3	*****				
7.82	18	1	****				
7.86	17	1	***				
7.90	16	1	***				
7.94	20	2	****				
7.98	15	1	***				
8.02	13	1	***				
8.06	10	1	**				
8.10	5	0	*				
8.14	2	0					
8.18	1	0					
8.22	5	0	*				
8.26	1	0					
8.30	1	0					
8.34	6	0	*				
8.38	6	0	*				
8.42	3	0	*				
8.46	1	0					
8.50	1	0					
8.54	0	0					
8.58	0	0					

NO. OF SAMPLES OVER 8.60 = 0  
 NO. OF SAMPLES UNDER 7.00 = 0  
 TOTAL NO. OF OBSERVATIONS = 1331  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-55 DEPTH 15M, START DATE 17/04/73

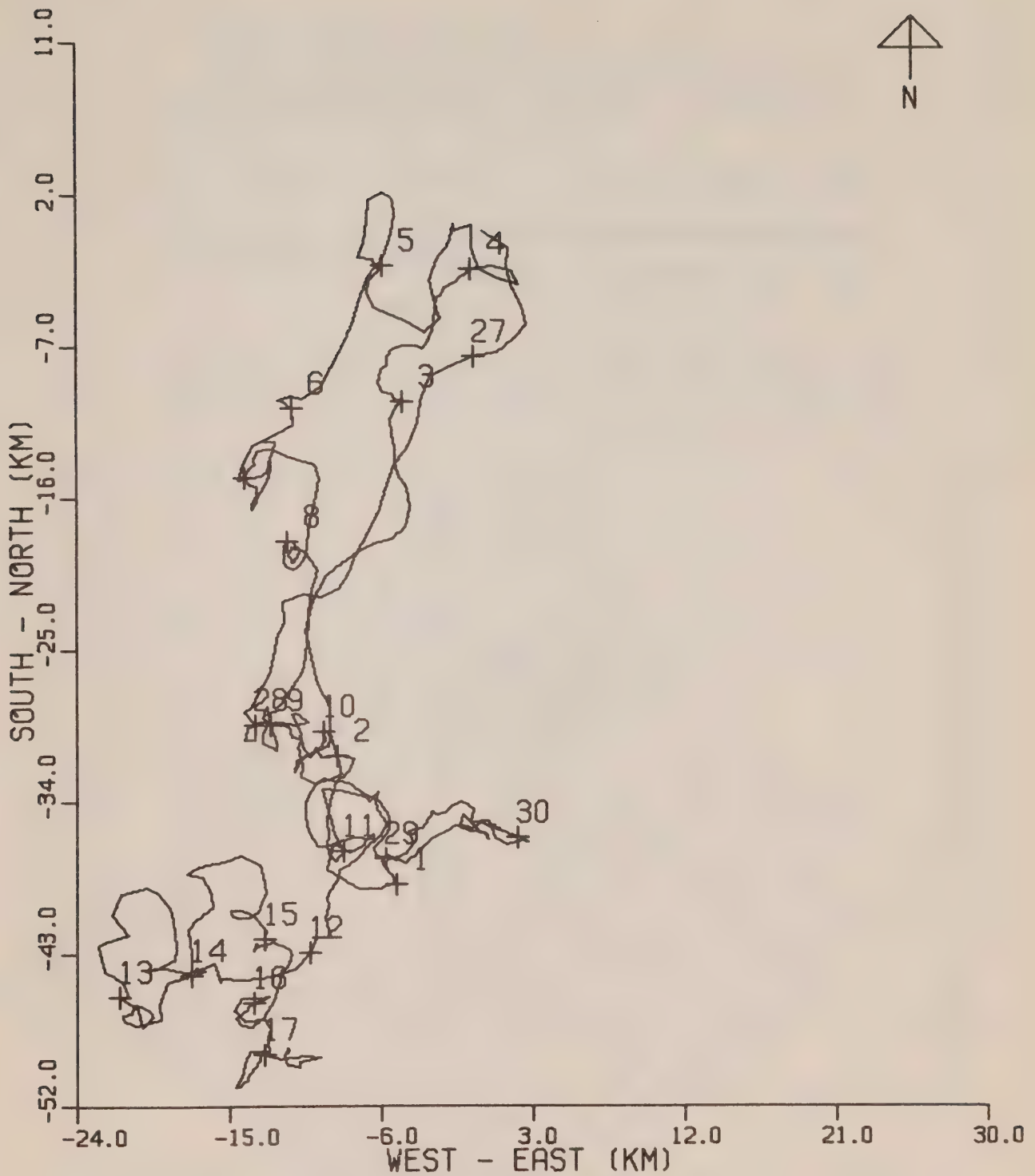
MEDIAN (PPT)	FREQUENCY NO. PCT		20	40	60	80	100
27.72	4 0	**	.	.	.	.	.
27.76	1 0	*					
27.80	2 0	*					
27.84	5 0	***					
27.88	5 0	***					
27.92	8 1	****					
27.96	8 1	****					
28.00	8 1	****					
28.04	22 2	*****					
28.08	25 2	*****					
28.12	18 1	*****					
28.16	16 1	*****					
28.20	22 2	*****					
28.24	21 2	*****					
28.28	18 1	*****					
28.32	35 3	*****					
28.36	20 2	*****					
28.40	26 2	*****					
28.44	36 3	*****					
28.48	42 3	*****					
28.52	46 3	*****					
28.56	63 5	*****					
28.60	58 4	*****					
28.64	71 5	*****					
28.68	81 6	*****					
28.72	77 6	*****					
28.76	39 3	*****					
28.80	79 6	*****					
28.84	104 8	*****					
28.88	45 3	*****					
28.92	58 4	*****					
28.96	62 5	*****					
29.00	3 0	**					
29.04	78 6	*****					
29.08	28 2	*****					
29.12	27 2	*****					
29.16	33 2	*****					
29.20	15 1	*****					
29.24	0 0						
29.28	1 0	*					

NO. OF SAMPLES OVER 29.30 = 0

NO. OF SAMPLES UNDER 27.70 = 21

TOTAL NO. OF OBSERVATIONS = 1331

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 15 M.

STARTING DATE: 26/ 4/73    ENDING DATE: 17/ 5/73

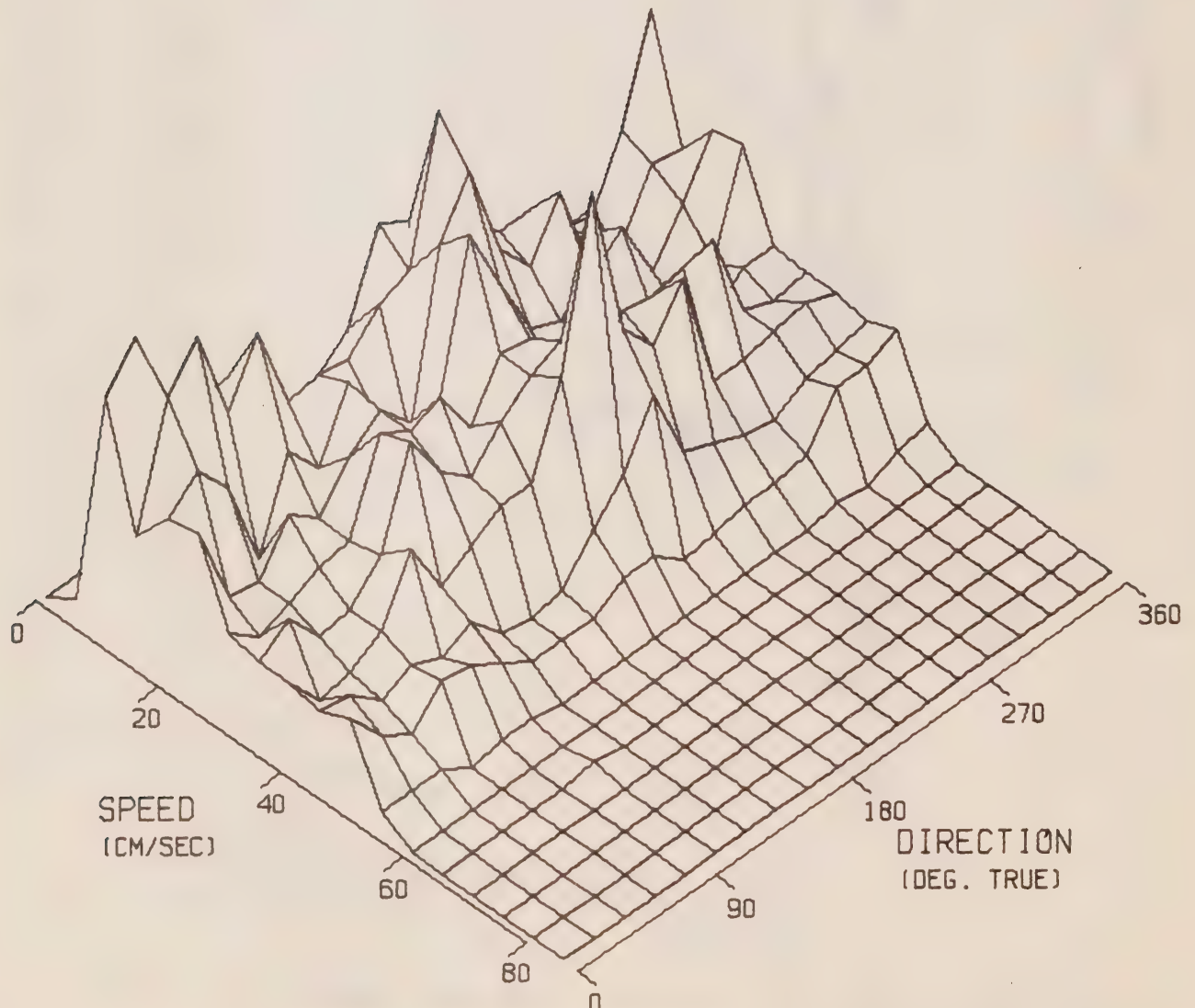


# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 26/ 4/73

NO. OF SAMPLES = 2992



STN. NO. H3-58 DEPTH 15 M.

STARTING DATE: 26/ 4/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

DIR	SPEED											
	000 TO	080 TO	160 TO	240 TO	320 TO	400 TO	480 TO	560 TO	640 TO	720 TO	800 TO	880 TO
	079	159	239	319	399	479	559	639	719	799	879	959
0- 14	006	050	037	015	021	016	009					154
15- 29	003	058	021	015	016	010	008					131
30- 44		055	028	014	014	007	007					125
45- 59	002	034	021	019	009	009	008					102
60- 74		029	026	012	011	018	004					100
75- 89		045	025	020	024	014	005					133
90-104	002	030	018	026	026	012	006					120
105-119	001	022	031	037	025	006	002	001				125
120-134		021	022	027	022	009	002					103
135-149	003	025	023	035	021	006	003					116
150-164	005	030	014	022	028	011	001					111
165-179	005	030	037	036	035	012	002					157
180-194	001	052	042	039	032	026	005					197
195-209	002	049	051	038	042	036	003					221
210-224	004	025	039	018	028	034	002					150
225-239	002	015	031	028	026	023	003					128
240-254	003	018	025	026	031	022	001					126
255-269	001	025	038	017	034	015	001					131
270-284	001	021	018	017	028	010	003					98
285-299	001	016	020	014	021	010	005					87
300-314	004	016	013	012	023	010	005					83
315-329	002	018	010	010	018	015	009					82
330-344	002	028	017	017	021	014	008					107
345-359	002	024	017	024	013	014	010					104
	52	624	569	112				1		0		2991
	736	538	359					0	0	0		

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 1

## HISTOGRAM OF SPEED

HOWE SOUND HS-55 DEPTH 15M. START DATE 26/04/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT.	50	100	150	200	250
			.	.	.	.	.
7	0	0					
21	0	0					
35	2	0					
49	14	0	***				
63	20	1	*****				
77	28	1	*****				
91	113	4	*****				
105	111	4	*****				
119	192	6	*****				
133	129	4	*****				
147	140	5	*****				
161	101	3	*****				
175	100	3	*****				
189	133	4	*****				
203	112	4	*****				
217	130	4	*****				
231	87	3	*****				
245	80	3	*****				
259	118	4	*****				
273	83	3	*****				
287	109	4	*****				
301	68	2	*****				
315	107	4	*****				
329	87	3	*****				
343	100	3	*****				
357	116	4	*****				
371	98	3	*****				
385	122	4	*****				
399	76	3	*****				
413	74	2	*****				
427	69	2	*****				
441	43	1	*****				
455	53	2	*****				
469	46	2	*****				
483	48	2	*****				
497	40	1	*****				
511	16	1	***				
525	20	1	***				
539	4	0	*				
553	1	0					

NO. OF SAMPLES OVER 560 = 2  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2992  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-5S DEPTH 15M. START DATE 26/04/73

MEDIAN (DEG.T)	FREQUENCY NO.	PCT	40	80	120	160	200
5	112	4	*****	*****	*****	*****	*****
15	84	3	*****	*****	*****	*****	*****
25	97	3	*****	*****	*****	*****	*****
35	87	3	*****	*****	*****	*****	*****
45	65	2	*****	*****	*****	*****	*****
55	77	3	*****	*****	*****	*****	*****
65	61	2	*****	*****	*****	*****	*****
75	81	3	*****	*****	*****	*****	*****
85	88	3	*****	*****	*****	*****	*****
95	78	3	*****	*****	*****	*****	*****
105	89	3	*****	*****	*****	*****	*****
115	77	3	*****	*****	*****	*****	*****
125	79	3	*****	*****	*****	*****	*****
135	69	2	*****	*****	*****	*****	*****
145	78	3	*****	*****	*****	*****	*****
155	71	2	*****	*****	*****	*****	*****
165	82	3	*****	*****	*****	*****	*****
175	117	4	*****	*****	*****	*****	*****
185	129	4	*****	*****	*****	*****	*****
195	130	4	*****	*****	*****	*****	*****
205	161	5	*****	*****	*****	*****	*****
215	96	3	*****	*****	*****	*****	*****
225	87	3	*****	*****	*****	*****	*****
235	85	3	*****	*****	*****	*****	*****
245	78	3	*****	*****	*****	*****	*****
255	103	3	*****	*****	*****	*****	*****
265	77	3	*****	*****	*****	*****	*****
275	67	2	*****	*****	*****	*****	*****
285	53	2	*****	*****	*****	*****	*****
295	64	2	*****	*****	*****	*****	*****
305	64	2	*****	*****	*****	*****	*****
315	43	1	*****	*****	*****	*****	*****
325	57	2	*****	*****	*****	*****	*****
335	66	2	*****	*****	*****	*****	*****
345	73	2	*****	*****	*****	*****	*****
355	67	2	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2992  
 SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-55 DEPTH 15M. START DATE 26/04/73

MEDIAN (DEG.C)	FREQUENCY NO.	PCT	100	200	300	400	500
7.07	0	0	.	.	.	.	.
7.11	0	0					
7.15	15	1	**				
7.19	486	16	*****				
7.23	132	4	*****				
7.27	289	10	*****				
7.31	253	8	*****				
7.35	234	8	*****				
7.39	48	2	*****				
7.43	56	2	*****				
7.47	59	2	*****				
7.51	40	1	****				
7.55	41	1	****				
7.59	53	2	*****				
7.63	54	2	*****				
7.67	62	2	*****				
7.71	28	1	***				
7.75	99	3	*****				
7.79	90	3	*****				
7.83	167	6	*****				
7.87	146	5	*****				
7.91	50	2	*****				
7.95	107	4	*****				
7.99	70	2	*****				
8.03	72	2	*****				
8.07	42	1	****				
8.11	94	3	*****				
8.15	55	2	*****				
8.19	25	1	***				
8.23	24	1	**				
8.27	26	1	***				
8.31	20	1	**				
8.35	17	1	**				
8.39	6	0	*				
8.43	10	0	*				
8.47	8	0	*				
8.51	7	0	*				
8.55	1	0					
8.59	2	0					
8.63	4	0					

NO. OF SAMPLES OVER 8.65 = 0

NO. OF SAMPLES UNDER 7.05 = 0

TOTAL NO. OF OBSERVATIONS = 2992

SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF SALINITY

HOWE SOUND HS-55 DEPTH 15M. START DATE 26/04/73

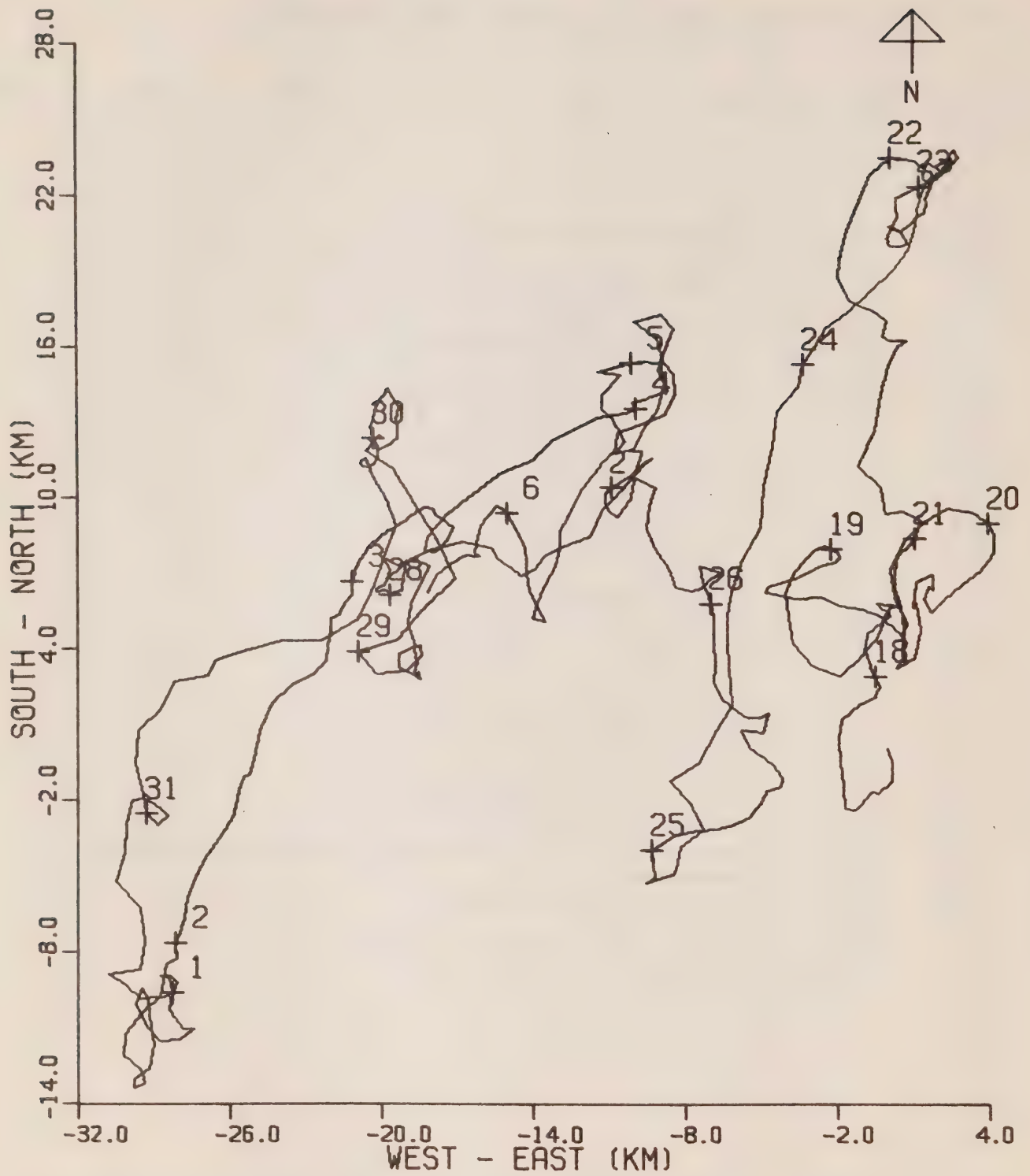
MEDIAN (PPT)	FREQUENCY NO.	PCT	60	120	180	240	300
27.83	8	0	*				
27.89	5	0	*				
27.95	9	0	**				
28.01	19	1	***				
28.07	38	1	*****				
28.13	76	3	*****				
28.19	89	3	*****				
28.25	84	3	*****				
28.31	142	5	*****				
28.37	150	5	*****				
28.43	149	5	*****				
28.49	118	4	*****				
28.55	151	5	*****				
28.61	85	3	*****				
28.67	100	3	*****				
28.73	78	3	*****				
28.79	85	3	*****				
28.85	39	1	*****				
28.91	92	3	*****				
28.97	56	2	*****				
29.03	53	2	*****				
29.09	34	1	*****				
29.15	73	2	*****				
29.21	100	3	*****				
29.27	94	3	*****				
29.33	107	4	*****				
29.39	127	4	*****				
29.45	105	4	*****				
29.51	260	9	*****				
29.57	74	2	*****				
29.63	121	4	*****				
29.69	73	2	*****				
29.75	159	5	*****				
29.81	39	1	*****				
29.87	0	0					
29.93	0	0					
29.99	0	0					
30.05	0	0					
30.11	0	0					
30.17	0	0					

NO. OF SAMPLES OVER 30.20 = 0

NO. OF SAMPLES UNDER 27.80 = 0

TOTAL NO. OF OBSERVATIONS = 2992

SAMPLE INTERVAL = 10 MINUTES



STN. NO. HS-5S

DEPTH 15 M.

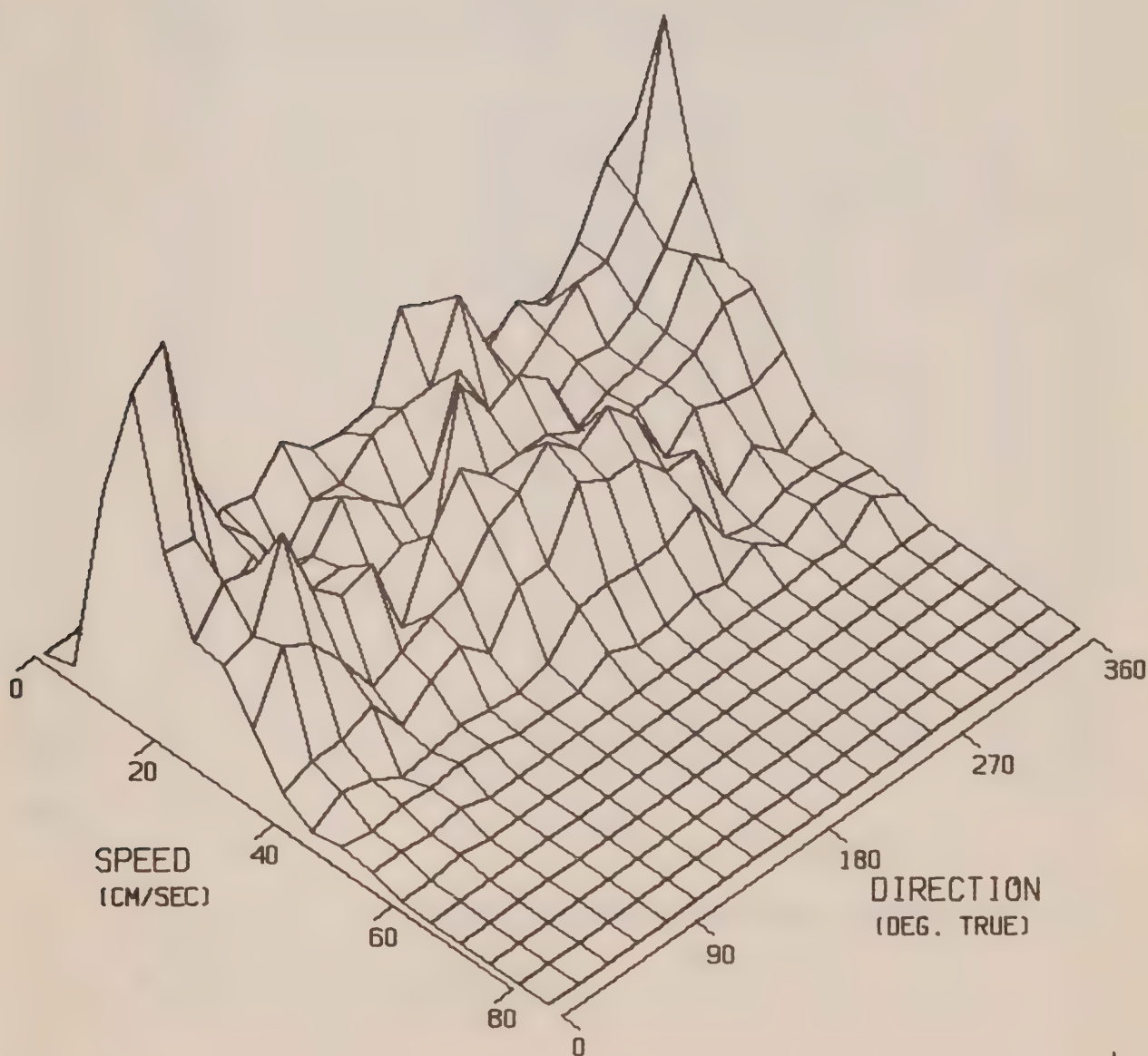
STARTING DATE: 17/ 5/73    ENDING DATE: 6/ 6/73

# FREQUENCY DISTRIBUTION OF CURRENT SPEED & DIRECTION

STN. NO. HS-55      DEPTH 15 M.

STARTING DATE: 17/ 5/73

NO. OF SAMPLES = 2890





STN. NO. HS-58 DEPTH 15 M.

STARTING DATE: 17/ 5/73  
SAMPLE INTERVAL = 10 MIN.FREQUENCY DISTRIBUTION OF DIRECTION (DEG. TRUE)  
AND SPEED (MM/SEC).

## SPEED

	000	080	160	240	320	400	480	560	640	720	800	880	
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	
DIR	079	159	239	319	399	479	559	639	719	799	879	959	
0- 14	001	073	057	026	025	006	004						192
15- 29	003	071	054	037	027	007	002						201
30- 44	004	054	033	031	028	006	003	001					160
45- 59	002	030	021	048	022	002	004						129
60- 74	004	028	029	034	011	001	002						109
75- 89	002	026	012	024	009	001	003						77
90-104	004	018	019	034	010	002	002						89
105-119		027	027	007	011	005							77
120-134	001	023	027	015	014	004							84
135-149	004	025	020	018	016	001							84
150-164	005	022	016	022	022	005							92
165-179	003	028	021	041	024	010	001						128
180-194	003	029	033	034	026	016	003						144
195-209	002	041	035	031	030	024	001						164
210-224	002	048	031	036	032	014							163
225-239	002	026	032	030	032	014	001						137
240-254	001	017	018	026	028	017	002						109
255-269	002	017	013	018	023	017	001						91
270-284	003	025	015	021	014	011	004						93
285-299	003	022	018	023	015	002	001						84
300-314	003	026	025	016	012	001							83
315-329	002	032	027	025	015	007	004						112
330-344	006	042	034	031	011	003	008						135
345-359	004	055	038	043	006	004	003						153
	66	655	463	49				0	0	0			2890
	805	671	180	1				0	0	0			

NO. OF SPEEDS EXCEEDING 960 MM/SEC = 0

## HISTOGRAM OF SPEED

HOWE SOUND HS-5S DEPTH 15M. START DATE 17/05/73

MEDIAN (MM/S)	FREQUENCY NO.	PCT	50	100	150	200	250
7	0	0	.	.	.	.	.
21	2	0					
35	0	0					
49	9	0	**				
63	29	1	*****				
77	59	2	*****				
91	147	5	*****				
105	118	4	*****				
119	189	7	*****				
133	127	4	*****				
147	152	5	*****				
161	128	4	*****				
175	120	4	*****				
189	124	4	*****				
203	99	3	*****				
217	126	4	*****				
231	97	3	*****				
245	111	4	*****				
259	120	4	*****				
273	105	4	*****				
287	143	5	*****				
301	98	3	*****				
315	126	4	*****				
329	109	4	*****				
343	98	3	*****				
357	88	3	*****				
371	57	2	*****				
385	67	2	*****				
399	43	1	*****				
413	42	1	*****				
427	46	2	*****				
441	25	1	*****				
455	19	1	****				
469	14	0	***				
483	11	0	**				
497	14	0	***				
511	9	0	**				
525	6	0	*				
539	6	0	*				
553	6	0	*				

NO. OF SAMPLES OVER 560 = 1  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2890  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF DIRECTION

HOWE SOUND HS-53 DEPTH 15M, START DATE 17/05/73

MEDIAN (DEG.T)	FREQNCY NO.	PCT	30	60	90	120	150
5	139	5	*****	*****	*****	*****	*****
15	121	4	*****	*****	*****	*****	*****
25	141	5	*****	*****	*****	*****	*****
35	111	4	*****	*****	*****	*****	*****
45	97	3	*****	*****	*****	*****	*****
55	81	3	*****	*****	*****	*****	*****
65	72	2	*****	*****	*****	*****	*****
75	59	2	*****	*****	*****	*****	*****
85	53	2	*****	*****	*****	*****	*****
95	60	2	*****	*****	*****	*****	*****
105	50	2	*****	*****	*****	*****	*****
115	53	2	*****	*****	*****	*****	*****
125	56	2	*****	*****	*****	*****	*****
135	57	2	*****	*****	*****	*****	*****
145	55	2	*****	*****	*****	*****	*****
155	56	2	*****	*****	*****	*****	*****
165	82	3	*****	*****	*****	*****	*****
175	88	3	*****	*****	*****	*****	*****
185	89	3	*****	*****	*****	*****	*****
195	98	3	*****	*****	*****	*****	*****
205	124	4	*****	*****	*****	*****	*****
215	116	4	*****	*****	*****	*****	*****
225	93	3	*****	*****	*****	*****	*****
235	87	3	*****	*****	*****	*****	*****
245	78	3	*****	*****	*****	*****	*****
255	64	2	*****	*****	*****	*****	*****
265	55	2	*****	*****	*****	*****	*****
275	61	2	*****	*****	*****	*****	*****
285	62	2	*****	*****	*****	*****	*****
295	57	2	*****	*****	*****	*****	*****
305	55	2	*****	*****	*****	*****	*****
315	70	2	*****	*****	*****	*****	*****
325	69	2	*****	*****	*****	*****	*****
335	89	3	*****	*****	*****	*****	*****
345	101	3	*****	*****	*****	*****	*****
355	91	3	*****	*****	*****	*****	*****
365	0	0					
375	0	0					
385	0	0					
395	0	0					

NO. OF SAMPLES OVER 400 = 0  
 NO. OF SAMPLES UNDER 0 = 0  
 TOTAL NO. OF OBSERVATIONS = 2890  
 SAMPLE INTERVAL = 10 MINUTES

## HISTOGRAM OF TEMPERATURE

HOWE SOUND HS-58 DEPTH 15M, START DATE 17/05/73

MEDIAN (DEG.C)	FREQ'NCY NO.	PCT	80	160	240	320	400
7.54	12	0	**				
7.62	105	4	*****				
7.70	388	13	*****				
7.78	254	9	*****				
7.86	324	11	*****				
7.94	280	10	*****				
8.02	338	12	*****				
8.10	281	10	*****				
8.18	145	5	*****				
8.26	79	3	*****				
8.34	37	1	*****				
8.42	32	1	****				
8.50	23	1	***				
8.58	30	1	****				
8.66	5	0	*				
8.74	18	1	**				
8.82	14	0	**				
8.90	28	1	****				
8.98	28	1	****				
9.06	51	2	*****				
9.14	41	1	*****				
9.22	58	2	*****				
9.30	39	1	*****				
9.38	38	1	*****				
9.46	14	0	**				
9.54	14	0	**				
9.62	7	0	*				
9.70	7	0	*				
9.78	10	0	*				
9.86	9	0	*				
9.94	31	1	****				
10.02	23	1	***				
10.10	17	1	**				
10.18	15	1	**				
10.26	24	1	***				
10.34	14	0	**				
10.42	12	0	**				
10.50	10	0	*				
10.58	9	0	*				
10.66	6	0	*				

NO. OF SAMPLES OVER 10.70 = 20

NO. OF SAMPLES UNDER 7.50 = 0

TOTAL NO. OF OBSERVATIONS = 2890

SAMPLE INTERVAL = 10 MINUTES



## HISTOGRAM OF SALINITY

HOWE SOUND HS-58 DEPTH 15M, START DATE 17/05/73

MEDIAN (PPT)	FREQUENCY NO.	PCT .	50 .	100 .	150 .	200 .	250 .
26.34	0	0					
26.42	0	0					
26.50	0	0					
26.58	1	0					
26.66	1	0					
26.74	1	0					
26.82	1	0					
26.90	2	0					
26.98	4	0	*				
27.06	4	0	*				
27.14	5	0	*				
27.22	23	1	*****				
27.30	55	2	*****				
27.38	51	2	*****				
27.46	77	3	*****				
27.54	61	2	*****				
27.62	38	1	*****				
27.70	36	1	*****				
27.78	45	2	*****				
27.86	46	2	*****				
27.94	44	2	*****				
28.02	34	1	*****				
28.10	49	2	*****				
28.18	30	1	*****				
28.26	24	1	*****				
28.34	56	2	*****				
28.42	78	3	*****				
28.50	106	4	*****				
28.58	199	7	*****				
28.66	195	7	*****				
28.74	212	7	*****				
28.82	211	7	*****				
28.90	241	8	*****				
28.98	142	5	*****				
29.06	187	6	*****				
29.14	233	8	*****				
29.22	238	8	*****				
29.30	105	4	*****				
29.38	48	2	*****				
29.46	7	0	*				

NO. OF SAMPLES OVER 29.50 = 0

NO. OF SAMPLES UNDER 26.30 = 0

TOTAL NO. OF OBSERVATIONS = 2890

SAMPLE INTERVAL = 10 MINUTES



25059











